

JUN 4 1945

610.5

C53

M5

548

QUARTERLY

The seal of The Chicago Medical School is circular. It features a caduceus (a staff with two snakes entwined and wings at the top) in the center. The words "THE CHICAGO MEDICAL SCHOOL" are inscribed around the perimeter of the seal.

THE CHICAGO MEDICAL SCHOOL

VOLUME 6, NUMBER 1

DECEMBER, 1944

BUY

WAR



BONDS

QUARTERLY

Published Quarterly Under the Auspices of

THE CHICAGO MEDICAL SCHOOL

VOLUME 6, NUMBER 1

DECEMBER, 1944

CONTENTS

EDITORIALS	2
ANNIVERSARY OF ANNIHILATION	5
Sidney Malitz	
SOME PERSONAL EXPERIENCES AT THE FIRST CZECH SURGICAL CLINIC	6
Louis F. Plzak, M.D.	
IMPRESSIONS OF MEDICINE IN SIAM	9
E. D. Congdon, A.M., Ph.D.	
DIAGNOSIS AND MANAGEMENT OF FOREIGN BODIES IN THE ESOPHAGUS	13
Harold Wesley Anderson, M.D.	
SOME PROBABLE PHYSIOLOGICAL MECHANISMS IN PSYCHOSOMATIC DISEASE	14
Don Shoemaker	
MICROSCOPIC TECHNIQUE	16
Percival Plotz	
STUDENT COUNCIL LECTURE SERIES	18
THE CHICAGO MEDICAL SCHOOL ENTERIC CENTER.....	20
ALUMNI NEWS	22
BOOK REVIEWS	25
SCHOOL NOTES	26
SOCIAL NOTES	27
ABSTRACTS	28
ORGANIZATIONS	29
LETTERS TO THE EDITOR	30
FACULTY NOTES	36

Editorials . . .

INTERNATIONAL STUDENTS DAY

November 17 has been designated "International Students Day" by various organizations interested in higher education. The date is an infamous one, for on that day in 1939 the German authorities virtually abolished all Czech colleges and universities in a legalized massacre that effectively demolished open student and professor resistance to Nazi methods. The higher schools had indeed been a source of irritation to the Germans. A quotation from the *Voelkischer Beobachter* states that "the Czechs have a well educated, much too studious youth; it will be necessary to prevent too large a number of their young people from receiving a college education and to see that they turn rather to commerce and trades."

The point is well taken, of course. The methods of fascism are irreconcilable with higher education. Liberal and scientific education will always prepare the mind to resist and overthrow those doctrines which are diametrically opposed to the fostering of humanity and dignity. The Nazis could not afford to allow the Czech universities to remain open. The Nazis could not in anyway counteract with logic the effect of truthful knowledge on the minds of the occupied peoples. They resorted to their well-practiced methods; they tried to destroy what they could not win over.

We should not consider the outlook all black, however. There are reports that those students and teachers who escaped the organized destruction are carrying on underground activities. The memory of the thousands of their fellow scholars who were sacrificed to the Fuehrer must surely make strong their efforts. These will most certainly form a well-tried nucleus for the rebuilding of Czech education.

There are two articles in the present issue which deal with Czech education. Dr. Plzak gives an interesting account of medical education in Prague before the war. Mr. Malitz's vivid

The Staff

EDITORIAL

Bernard H. Shulman, *Editor-in-Chief*

Associate Editors

Burton W. Rockliff Arnold Statsinger
Arthur Levin Sidney Malitz
Naftalie Rapoport Emanuel Chusid

Members of the Staff

R. Kamil R. O. Christman
E. Rockowitz A. Siegel
S. Isaacson D. Shoemaker
N. Rosenzweig W. Salzman

E. Rosenfeld, *Abstracts* S. Warman
L. Epstein H. Berger, *Alumni News*

ART

Norma Helmen, *Art Editor*

Members of the Staff

L. Asher A. Schapiro
S. Maltz E. Jacobson
M. Lerner, *Photography*

BUSINESS

Clarence A. Peckler, *Business Mgr.*
Eugene Plous, *Associate*

Members of the Staff

M. Feldman, *Circulation* M. Moore
J. Goldflies M. Morrel

ADVISORY BOARD

Maxwell P. Borovsky, M.D.
John C. Evans, D.D.
Richard G. Roberts, Ph.D.
Harry Culhane, M.D.
William E. MacFarland, Ph.D.
Henry A. Smith, M.D.
Jay A. Smith, Ph.D.

Medical
8
6-4-45

description of the events of November 17, five years ago shows all too clearly what Fascist principles embody and what they have in store for education in any country those principles enter.

The moral to be drawn from the story is quite evident; we need not mention it here.



ENDOWMENT

Within the past few months the student body of The School has achieved a degree of cooperation new in its history. Both the fact of cooperation and the reasons underlying it are commendable. The Student Council, as the direct representative of the student body, is the means by which the students can be encouraged and even inspired to make the efforts we shall find necessary before we can gain our goal of recognition.

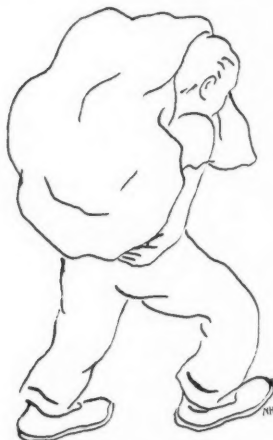
To this effect, Council has established the Endowment Committee. The problem of endowment is certainly the most urgent and pressing matter on our agenda. The Endowment Committee has already done considerable to clarify the situation. The *Problem* has been presented directly to the students. This is what the students asked for; this is what they got.

The *Problem* is: How shall we get the endowment we need? There are many answers to that question. The most obvious answer is that it must be initiated through student effort. This entails sacrifice. However, the alternative to success is failure. Which do you prefer?

The excellent feature of the present plan is that all incoming funds for the purpose of endowment shall be held in *escrow* until our goal has been reached. If the campaign is successful, the money will be returned to its source, thus, not one of the contributors need be afraid of throwing good money after bad. The money to be collected will either bring results or it will go back where it came from. *It will not be wasted.*

This is a clear and definite statement concerning the present attempt on our part to aid in solving the *Problem*. With the information in their hands, the students are now in position to give the Endowment Drive a strong impetus; to serve as the

core of the campaign.* We repeat this is not an easy job, nor is it an attractive one. Still, if enough of the student body does not immediately undertake to assume the responsibility, there may not be an opportunity to try again some other time.



Are you going to like this—

It is noteworthy that the whole school has thrown itself enthusiastically into the plan. An open letter from the Dean to the Endowment Committee states that the Faculty of The School has pledged itself to equal the amount raised by student effort in the present drive. We can easily venture to say that medical education in this country has never before seen such a concerted effort by teachers and students to improve their institution of learning. Physicians and medical students who will go to lengths to put their school on a par with the better medical schools are extremely worthy of commendation.

Other educators and students will recognize in this undertaking the sincerity of the effort of our group.

While the enthusiasm which had its core in the student body has spread to the Faculty, the present stage of the Drive is still in student hands. It is the student who must form the foundation in students hands. It is the student who must form the foundation of the Drive, for the whole effort hinges upon his coming through with the goods. It is still *his* work, *his* responsibility, *his* sacrifice that will point the direction to success. With one determined effort the achievement may be secured. The situation stands outlined in bold perspective. It is sharp. It is clear.

There is no alternative to success.



or are you going to ride in with Charlie?

ANNIVERSARY OF ANNIHILATION

Sidney Malitz

ONE of the most vicious, animalistic outrages of modern times, which has shocked both medical men and other decent citizens alike, was the brutal and sadistic massacre of Czechoslovak students and professors by the Nazis on November 17, 1939—the date on which they also closed all higher Czechoslovakian schools. There have been few incidents in the memory of the present generation which could boast of such wanton cruelty and deliberate planning. The Czech people had opposed the Nazi movement since its inception, and the events which transpired on this memorable day were carefully designed to cripple the Czech people by striking at their greatest pride and most powerful champion, their universities. It is difficult for one who is not a native of Czechoslovakia to realize with what great reverence and devotion a Czechoslovakian regards his schools. He sees in them the symbol of enlightenment and progress. Through them he plans the education and improvement of his children. But more important than that, he looks to them for the preservation of his culture, language, democratic ideals and political freedoms which are the tenets upon which his country was founded.

The first Czech university, the University of Charles, was founded by King Charles the IV in 1348. The school was the focus of continued attacks during the Austrian-Hapsburg oppression, and as a counterbalance, the University of Ferdinand was founded by the Germans to oppose it. Nevertheless, the University of Charles survived to become the center of Slavic Culture. Young men from Yugoslavia, Bulgaria, Poland and Russia flocked to study there. Early in 1938, Czechoslovakia could proudly boast 8 universities with a total enrollment of 20,000, 20% of whom were foreigners. The largest schools were the University of Charles, the Huss Theological Faculty, the Institute of Technology of Prague, the University of Masaryk in Brno, the School of Veterinary Medicine, the School of Technology in Brno, and the School of Mining in Pribram. The savage oppression of the Nazis has closed them all.

This year marks the 5th anniversary of the closing of the Czech Universities. On November

17, five years ago, the living quarters of both students and faculty were invaded by S.S. men and members of the Gestapo. The students were rudely awakened between 2:00 A.M. and 3:00 A.M. with typical German brutality, and forced to line up against the wall with their hands held high. None of them were given time to dress. Some wore pajamas, others underwear, and still others maintained a fearful and embarrassed silence in their nudity. No one was allowed to move. Anyone who did so was horribly beaten or shot on the spot. While their unfortunate victims were kept in this painful position for hours, the members of the "most cultured nation on earth," plundered and looted the meagre possessions of the students. Booty which was considered insignificant by the Nazis, such as photographs and letters from dear ones, bibles and other personal belongings, were put to the torch and burned. The girls dormitories saw even "gayer" proceedings. The S.S. man who later gleefully described the lurid details in a Czech beer-house was mysteriously shot by an "unknown assassin", as he left the place.

Students and teachers were packed into cattle cars, after the looting had been completed, and shipped to concentration camps in Germany. Some of them came back; most of them did not. Those who did not return succumbed to the cold winter, the hard labor and the constant beating. Many remained dressed all through their internment in the original pajamas and night gowns in which they were arrested. The Germans considered it an excellent joke to send the ashes of students beaten to death, C.O.D. to their parents. It was a good way to cover up the traces of flogging and rape. Besides, it brought money into the pocket of the German post office.

The people of Prague rose against these outrageous atrocities. For two days the streets were teeming with citizens. No German dared to walk alone for fear of attack. The invaders answered with machine-guns. Airplanes of the heroic Nazi "Luftwaffe" cruised watchfully over the city skies. In two days, however, the city was quiet again. The revolutionary mood had

(Continued on page 34)

SOME PERSONAL EXPERIENCES AT THE FIRST CZECH SURGICAL CLINIC

Louis F. Plzak, M.D.

*Assistant Professor of Surgery and Surgical Anatomy,
The Chicago Medical School*

(Presented before a dinner meeting of the Phi Lambda Kappa Medical Fraternity, Nov. 22, 1944)

TONIGHT, I have chosen to speak on the development of Czech surgery and about some of my personal experiences at the first Czech Surgical Clinic of Charles University in the years 1933 and 1934.

I thought this to be fitting at this time for it enables me to pay tribute to my former Czech colleagues who were among the many medics that were murdered by the Nazis at Charles University just five years ago on Nov. 17, 1939.

During the 13th century in the little Kingdom of Bohemia ruled by king Charles IV there came into being one of the earliest institutions of higher learning in all Europe. Built in the capitol of Prague and named Charles University, after the king, the institution grew and prospered. It encompassed the various arts and philosophies, and included medicine and surgery. Its attitude was liberal and encouraging to all who desired to study, be they native Czechs or foreigners. This attracted many of the great minds of that period from Paris and Padua which were the only other important places of higher learning in Europe.

For almost 300 years, the university was administered by the Czechs and it played a great part in the crystallization of the reforms of Huss which marked the Reformation Period. Its brilliant existence however soon came to an close when after the Battle of White Mountain in 1620, Bohemia lost its independence and came under the rule of the Hapsburgs. With this, the administration of the university passed from Czech to Austrian rule.

Torture, persecution, plunder and mass destruction of Czech culture followed in the wake of the conqueror, and what culture survived was what was learned from lip to lip by those fearless enough to carry on the struggle. As a result the identity of many illustrious men has been forever lost to Czech culture, for in order to be able to survive and to teach, all writing and teaching had to be in the German language. I need only mention such names as Skoda, Pravaz, Rokitansky, Purkinje and the great surgeon Albert who was a contemporary of Billroth

of Vienna and of Nicholas Senn of our own country. All of them have left their mark on medicine and surgery for all time.

The rigid Austrian rule continued until 1870 when a new dawn again came to Czech culture and medicine. Under the reign of the more tolerant Emperor Joseph, a petition was granted to the Czechs to create a Czech University separate from the German school. It was staffed by Czech teachers and was solely for Czech students. By 1900 Czech medicine had already made great strides and had contributed much to the knowledge of chest diseases, and to bone, joint and intestinal surgery. For example the operation of colostomy as it is done today is based on the principles of Maydl who was the first chief of the Czech surgical clinic at that time. The full culmination of academic freedom finally came in 1918 after the last war when Thomas Masaryk founded the Czechoslovak state. This great democrat and idealist, fortified by a background of American realism, believed in freedom and education for all, and made this the foundation stone upon which the beautiful Czechoslovak democracy was built.

Not for Czechs alone, but for all national groups alike, be they German, French or Poles, schools were provided with teachers from their native lands and taught in their native tongue. We in this country all know how this ideal has failed and by whom it was destroyed.

In the years 1933-1934 it was my good fortune to be a member of the Czech Medical Faculty of Charles University as an Assistant in the first surgical clinic. This clinic numbered 192 beds and was part of the immense general hospital of the city of Prague. It was headed by a young and very able surgeon—Professor Arnold Jirasek—who already had made numerous contributions in the field of Neurosurgery to which he devoted most of his attention. His predecessor, Kukula, followed Maydl and distinguished himself by writing a very extensive treatise on appendicitis and other allied surgical diseases. One could not help but admire this man Jirasek, for he could go from surgery of the brain to that of the hand or abdomen or neck with ease and exactness.

Discipline, truth and accomplishment were the things that ever guided him and these he expected most from the men that worked with him.

The staff of this clinic was composed of two docents or assistant professors, eight assistants or residents, four secundars or junior residents, seven elevés or interns and about fourteen fiskus or externs; the last were assigned to the various wards of the clinic and were chosen from those top students of the Junior and Senior Medical class who particularly showed surgical qualification. Thus there were some thirty-five men in all on the staff of this clinic.

In three alternate days of each week, at seven-thirty A. M. there was an official visit by the staff to all the patients in the clinic and I can assure you that it was a very impressive sight to see thirty-five men all dressed in white, following their chief up the winding stairway, three flights up, going from ward to ward, reviewing briefly or in detail, each hospital case. To see an assistant or an intern step forward, click his heels, stand at attention and ask for permission to speak and then hear him relate the particulars of the history, examination, diagnosis and type of surgery performed and stating the reasons for doing same, was indeed an education in discipline that would impress any American physician.

Patients awaiting operation were presented only when the diagnosis and preparation were completed; difficult diagnostic problems and post-operative complications were referred to the chief who often gave a brilliant solution of the case after an examination of the patient and of the record or would offer suggestions for further study.

These visits lasted for two and half hours and then a quick visit was made to the out-patient Department of the clinic. This functioned very much like our dispensaries. From here patients were admitted to hospital beds and it was amusing to see the swapping of cases by the secundars the assistants who were assigned as heads of their wards, so that an equal distribution of varying surgical material could be had by all. So also was it amusing to see how some of the ordinary garden variety of such lesions as subacute appendicitis and hernia were discouraged from immediate entry. I found later that this was necessary in order not to clutter up the hospital with too many such cases, if one expected to do

goiter, thoracic, breast, stomach and intestinal surgery as well.

After the visit, the chief assigned the operative team, designated the surgeon and scheduled the cases to be operated. The type of operation was left to the discretion of the surgeon and this depended upon what pathology he found. The surgical team usually consisted of four men; the surgeon, his assistant, instrumentar and the anaesthetist. This team would then retire to one of the operating rooms, which were located on the top floor of the clinic. In summer, these rooms were very hot because of the overhead skylight roof that projected down onto the sides, and in order to prevent the beating sun from sending the patient as well as surgeon into a state of heat exhaustion, a steady stream of cold water flowed over the skylight roof from morning until night. This helped only in part to cool off the room.

The preparation for an operation was really a ritual. We would first pull rubber boots over our shoes and then don heavy full sized rubber aprons. Caps and masks were then carefully put on to cover the mouth and nose. Scrubbing of the hands and forearms up to the elbows with soap and brush took a full twenty minutes and this time was measured by hour glass. The hands were then placed in a bath of ether and alcohol for five minutes more, and then dried, and gown and gloves applied.

Most of the operations were done under local and spinal anaesthesia and ethyl chloride induction, followed by ether or chloroform inhalation. Because this work was in the hands of men who did nothing but surgery every day, operations were executed quickly and with little morbidity and little mortality. But I also believe that the reason why most of the patients there could stand extensive and hazardous procedures, with little postoperative difficulty as compared to our patients here, was no doubt due to the hardened way they lived; which conditioned them to be better able to withstand surgical trauma.

The technique differed from ours in that most of the suturing was done with silk, cotton and other unabsorbable material. They questioned me about catgut and felt dubious to hear that relatively few of our cases developed leakage and peritonitis after stomach and intestinal suture. Their results were good; wound healing was strong and per primam, and only a few cases

showed intolerance to the unabsorbable suture material. Stomach resection cases could be out of bed the next day and feeding was started early. Postoperative hernias rarely occurred. I quickly abandoned my loyalty to catgut and realized that just like many roads can lead to Rome, so also many different methods in surgery can lead to good results.

The surgical education of the medic began in the junior year and consisted of attending daily two hour lectures given by the professor. These lectures were accompanied by clinical demonstration, pertaining to the subject discussed. Other instruction was at the bedside in small groups, very much like our clerkships. No formal textbooks were used for none existed. Notes of the lectures were always taken feverishly and then compared with others lest some point be missed. German and French texts were referred to as well as the current literature in German, French and English. In the wards, the student wrote the history and kept the daily log of the progress of the patients assigned to him. When the patient was to be operated upon, the student was invited to be present.

The secundar and assistant corrected the histories, or did the necessary laboratory studies, made the final diagnosis, prescribed the treatment and recorded the progress of the patient. On many occasions the wards would be filled with emergency and other necessary surgical patients so that not enough beds were available, and yet the hospital could not refuse entry to such cases. To meet these demands mattresses were put on the floor and patients put on them until beds were available.

Many interesting incidents of human interest arose from time to time in dealing with these sick—that came from all over the city and country-side. One of these dealt with a gipsy patient who was brought to the clinic because of a stab wound of his abdomen that penetrated several coils of intestine. Following the operation, which consisted of suturing the rents in the intestine, his gipsy wife insisted upon remaining at his bedside but no sooner had the patient recovered from the anaesthetic than a violent argument took place between them. She proceeded to dress him and it was necessary to put the patient's clothes under lock and key and to order his wife to leave. Late that night the gipsy was reported gone and yet his clothes were there. A hurried

search revealed no gipsy anywhere, and it was a little chagrinning to have to report to the chief next day that a patient just after operation was missing and unaccounted for. Many weeks elapsed and then one day, during the usual professorial visit, there amongst the waiting dispensary patients stood the tall, dark, slender, missing gipsy. His only reason for return was that the unremoved skin sutures were annoying him. When asked why he left he said "I was tired of my wife's nagging to get up and go call one of our horses that was lost in the forest and that would answer to no one's call except my own." His wife had returned to the clinic that night via the fire escape and window and brought him another pair of shoes and pants. He not only found the horse but had kept working ever since.

Wednesday at the clinic, all through the school year from October to June, were of particular interest because of the student examinations in surgery. These were the so-called Rigorosas. They lasted anywhere from four to eight hours and this depended largely upon what state of humor the chief of the clinic was in that day. Small groups of two to six students were examined each time. To take this examination the student had to first complete satisfactorily the work in surgery and then send a request to the professor for an invitation to be examined. These examinations were oral and practical, very much like our comprehensives. The student that failed the examination returned for a re-ex and if he failed the third time, was automatically dropped from the school and was made ineligible for further medical education elsewhere.

One of the most instructive functions at the clinic for me was to attend the Monday evening clinical staff conference. The professor always presided and started the meeting promptly at seven P.M. Attendance was compulsory and except for illness or work, no excuses were accepted. The men were seated in the order of their rank—the docents at one end of the table flanking the professor, then the assistants and lastly the fiskuses at the other end. A good deal of the evening was given to the review of foreign medical literature. This included the French, German, English, Italian, Russian, Polish, Sandinavian and Balkan literature. Translations and synopses were given orally or written in Czech by the

(Continued on page 33)

IMPRESSIONS OF MEDICINE IN SIAM

E. D. Congdon, A.M., Ph.D.

Professor of Anatomy, The Chicago Medical School

SOME medical students of this school may well be temporarily carrying on medical practice in the Orient before our more acute Pacific involvements have reached a settlement. There are only 9,000 western-trained doctors for the 400,000,000 people of China. Our rather scattered impressions have for their chief recommendation that they have come from firsthand experiences or from Siamese friends and medical colleagues. As an introduction to Siam, the writer had spent five years teaching anatomy in China. The period of stay in the Bangkok Medical School was of an equal length.

Discussion of medicine in Siam would have little meaning without some consideration of the people and the land. Picture Siam as a tropical Oriental country, inhabited by a people of the yellow race, whose heredity in some regions has a considerable negroid component. Although some of the Siamese have had little cultural background they show capacity to absorb western learning.

There is a large central valley cut up by innumerable irrigation canals for the cultivation of rice. The water buffalo is used to till the soil and the poorer people of the valley live chiefly on rice and the fishes which swarm in the canals. Siam has a hinterland of mountains where elephants costing three thousand dollars drag teak logs to the streams. Food is more varied in the mountains. Indeed, Siamese fruits are a story in themselves. Elephants tend to constipation and missionary doctors have at times to thrust their arms into the rectum up to the elbow to remove impacted feces. I saw a bushel of arsenic pills almost as large as golf balls in a Bangkok pharmacy. They were destined to be administered by an up-country doctor to elephants when they threatened, as often happens, to go into a decline.

About fifty years ago the last of the completely Oriental monarchs died. He had power of life and death over all. That he had somewhat of a corner on the feminine beauty of his small kingdom is attested by the fact that he possessed more than 300 wives and 300 children. He was the first forward-looking monarch; and sent a

score of his children to Europe for education. The backward condition of culture in his youth is indicated by the fact that the little principalities of his kingdom had dissimilar official weights and measures.

A dominating element of the life of the people is the jungle. In a large part of the valley and the mountains, where the country is not cleared for cultivation or dwelling, plant and animal life is densely massed. You can pass into the middle of a city block in Bangkok between buildings, some of which are modern ferro-concrete and find yourself immersed in and cut off by a dense tropical growth. On a road through the jungle one hesitates to go fifty feet from the highway for fear of being lost.

The constant threat to human life by the teeming animal dwellers of the jungle can scarcely be appreciated by us here. When they were blasting tunnels for the Siam State Railways in the Cheng Mai mountain district, the tigers were frightened and left the locality in large numbers. Foreign missionaries and traders of adjacent regions were compelled to take up their rifles to protect their neighborhoods. Doubtless there are waves of silently migrating jungle animals leaving battle zones in the Pacific, frightened by the noise and activity. This must somewhat decrease the loss of life.

Elephants, the fierce jungle buffalo and the half domesticated water buffalo gore people frequently. A six year old girl was brought into our hospital just before I left with her abdominal wall torn open by a water buffalo while she was overseeing its grazing. These animals often fly into a rage at seeing a yellow dead leaf of a banana palm waving in the breeze. Black panthers have a way of dropping from the trees upon people. A friend was traveling in an auto when one of them launched itself onto the roof. It was shaken off by speeding up the car.

Reptiles are a serious menace. There are three species of the alligator tribe. Sometimes an alligator is killed by gulping down a scalding hot melon placed near it. Pythons lurk in the jungles. The python slowly coils up around a standing man and does not constrict until he has

surrounded all but the head unless the victim moves. Then the reptile waves his head above his prospective meal and sprays him with saliva preparatory to swallowing him. A python hunter does not interfere with this routine until he is sprayed and then aims a lightning stroke at the python with a knife. The giant king cobra will pursue a running man with such singleness of purpose that he can be diverted only by some such means as the crossing of a stream or climbing onto a hut. Because of the abundance of poisonous serpents a Pasteur institute is located in Siam for the preparation of antivenoms.

At the seashore, stockades protect against man-eating sharks. Striped water snakes are seen nearly everywhere along the beaches. A minute fish works its way into the urethra of bathers and is dislodged with difficulty because its sharp spines sink into the mucous membrane. Large rays give powerful electric shocks.

In the rice or paddy fields mosquitos sometimes cover the exposed skin so thickly that one can literally scrape them off in handfuls. Buddhist priests often pick off a single mosquito delicately and release it into the air as their faith forbids killing animals. On pilgrimages young priests carry large umbrellas with mosquito netting hanging down around them. The handles are thrust into the ground and thus the priests can sleep or sit in contemplation enclosed by a tent of mosquito netting. Bangkok and smaller Siamese towns swarm with half-starved dogs because puppies may not be killed. The ribs and hip bones show; and the skin is covered by scabs. The voice is a high-pitched wail instead of a bark. A riot occurred in Bangkok when public health doctors tried to kill these beasts in a campaign against rabies.

More sinister menaces to life than the larger animal forms of the jungle are the invertebrate, bacterial and virus parasites. Not very long ago a Westerner took his life in his hands when he ventured up country; although the people were friendly. India has been said to have been the greatest reservoir of human disease in the world. One wonders if Siam for its size was not just as bad. Asiatic plague was endemic and spread by the rats in the rice bins. Also there are cholera, schistosomiasis, hookworm and leprosy. Intestinal worms are so frequent that in China the mission hospitals administer a vermifuge as admission routine. They seem no less frequent

in Siam. Tetanus was carried by half the population of Peking, although most Chinese tolerate it. I did not learn how widely spread it was in Siam. Infections of haemolytic streptococcus are common. Bacterial and amebic dysentery are common. Bacterial and amebic dysentery are among the ailments almost daily met with by the physician.

Malaria, especially in the mountains, is a serious burden. *Anopheles minimus* can pass through mosquito nets and breeds in rapidly flowing mountain streams. Many children in some districts not long ago were misshapen from enlarged spleens due to malaria. The public health service recently inaugurated by the Rockefeller Foundation carefully searched every airplane of the Royal Netherlands Airways stopping at Bangkok for mosquitos carrying the yellow fever organism. This species of mosquito is abundant in Siam, but it has not up to the present become a carrier of the disease and yellow fever, is consequently, as yet unknown there.

Siam is one of the Oriental localities where renal calculi are frequent. A missionary doctor with a hospital of only twenty beds showed me a collection of 600 which he had removed. He frequently operated on little children and had a special room for Buddhist priests. He showed me a sixteen year old boy with a vacant expression, whose mental processes had been undermined by many bouts of pain from calculi. At the meeting of the Far Eastern Society of Tropical Medicine at Bangkok it was stated that the explanation for the great frequency of the calculi in this part of the world had not been found.

Much of the need of Siamese medicine results from the lack of sanitation. Bangkok is the only city in the country supplied in any large degree with piped water. The locality where the Medical School was situated has a population of 100,000. There are water pipes only to the school and to another small district. The great bulk of the population depends here, as in most lowland Siam, upon the sluggish canals for the frequent cooling baths necessary for comfort. It is the general custom for latrines to be built over the canals. With a few exceptions all cooking and drinking water in the lowlands comes from the canals. There was formerly a small hospital in Bangkok whose infected bandages were washed in a canal close to crowds of bathers. The dishes used by the various patients

were washed in a common tub of lukewarm water.

In the country villages native sanitation is no better than in the city. The smaller houses are on stilts with a hole in the floor. Refuse is simply swept through the hole onto the ground, where it either remains or is attacked by pigs or jungle animals. These native sanitary conditions, as will be later seen, have been improved to a certain degree. Also the bright sunlight somewhat mitigates many infections by its sterilizing power. It was found that thin strips of flesh taken from a buffalo heavily infected with glanders were safe to eat after a short time in the bright sun.

Siamese medicine has several phases. There is, of course, the native medicine. Then there is the western medicine practiced by a few hard-worked Protestant missionary doctors. Also in addition, there have been a few doctors from Europe. In the last twenty years the Rockefeller Foundation has greatly accelerated westernization of medicine throughout the country.

It would take a public health expert to assess the exact degree of penetration of western medicine up to the time the Japanese arrived in Siam. One is likely to find the best and the worst in the same city block. The Japanese have closed the magnificent Rockefeller medical school in Peking and supposedly have done the same to the Bangkok school as a feature of their co-prosperity sphere.

Native medicine has much in common throughout China and Siam. It is not greatly different from the medicine of the Middle Ages of Europe. Its lowest form in Siam is the practice of supposed magic by charms and incantations. This is carried on at least in part by the more ignorant Buddhist priests. Fresh wounds and newborn babies are often splashed with foul water.

Next comes the application of spirit beliefs to medicine. These pervade the thoughts and activities of many Orientals. Not so long ago it might have happened that in erecting a new public building a man would have been killed and thrown into a hole prepared for a foundation post so that his spirit would remain to guard the building, thus providing a sort of janitor service without the benefit of labor unions. A doctor had a patient a little boy who had been run over by an oxcart. After the child was carried into the house, his father went to the scene

of the accident with broom and dust-pan and swept up the road where the misfortune occurred. Then he emptied the dust pan into the child's bed, thus returning his spirit to his body. Foreign doctors in Siam will at times deliver a dead child of a mother who died in childbirth to relieve the family from the supposed persecution by the especially malignant spirit released by a woman dying in labor. Siamese little boys are often given girls' names, as the evil spirits think females less worthy of attention and are deceived as to the sex by this device.

Evil spirits are supposed to enter the body and produce disease. A headache is regarded as due to an evil spirit in the head. A mass of buffalo dung is placed on top of the head. The evil spirit does not like dung, and escapes through a hole at the center of the mass thoughtfully prepared by the native doctor.

There are in general two ways of persuading the spirit to leave the body of the sick. One is by rough, unpleasant treatment, such as beating and shouting at the patient. A friend described the death of a woman convalescing from influenza resulting from this procedure. The other method is to please the spirit. For this purpose candles and flowers are placed around the bed of a patient and friends talk soothingly and sing.

In China during the Ming dynasty a printed system of native medicine attained the bulk of a modern encyclopedia. The native doctors in Siam can help in some diseases. They have effective vermifuges. They can sometimes break fevers, although ignorant of the nature of fever. They frequently prescribe a broth which is an infusion of two or three dozen plants. Their reasoning seems to be that if one plant does not help, another will. Westerners call this the 'shot-gun' treatment. Parts of tigers are exported to China to be used as drugs. Metallic mercury prescribed by native doctors has been found by x-ray in the intestines of children.

The medieval doctrine of tumors explains a treatment more frequent in China than in Siam. This practice is termed 'acupuncture'. It is supposed that a certain fluid in a definite location is the cause of each disease. Therefore, a needle is thrust into the proper spot to drain the fluid. I have seen this in China. An old Chinese doctor was treating a wasted tuberculous boy of ten. He thrust his large rusty needle into the joints of the fingers. After a puncture he would

squeeze and usually blood would appear. This did not arouse his interest. Sometimes he expressed a drop of synovial fluid. That was what he was looking for. He regarded it as the humor. To teach acupuncture a bronze statue is covered by small pits at the sites of the punctures for various diseases. Smallpox humor occurs in the scapular region. To learn the progress of a medical student, all that is required is to cover the statue with wet paper concealing the pits from view. When the examiner names the disease, the student tries to thrust the needle through the paper into the right pit. If he can do this accurately for all the diseases, his education is complete.

As far as I could learn, surgical practice was entirely limited to the binding up of wounds. Buffalo dung is often placed on the wounded surface. Some Siamese also apply a plant leaf which a western doctor claimed to have antiseptic properties.

After parturition a Siamese mother is supposed to have too much fluid in her body. She is given the treatment referred to as the 'hot-bed'. She lies on a pallet beside a fire of wood that in burning radiates heat like a charcoal fire. This treatment is continued for a month. As its effect is reinforced by the heat of the tropics, the condition of the patient at the end of a month can well be imagined. Sometimes in her weakness a woman drops her hand into the fire or even rolls into it. A doctor told me of a woman that while weak from parturition was hung up by her arms as a method of medical treatment. Her heart naturally stopped in a little while. We were not able to learn the supposed value of this treatment.

In Siam there is a highly developed system of deep massage that has a large following. Perhaps the pressure came to be applied so deeply because the heat and moisture of the country tend to often greatly relax the muscles. Tricks such as snapping cervical vertebrae or pressing on a nerve to cause pain are used to impress the patient.

We heard of native doctors absorbing a little western medicine and illustrating the poet's dictum 'a little learning is a dangerous thing'. For example: When I was in Siam, some doctors had picked up the western practice of vaginal examination. As they had very little knowledge of the real use of this procedure, they often did

great harm. On the other hand, a native doctor told a colleague that he could catheterize the urethra. My friend expressed surprise. The doctor conducted him to the edge of the village and broke off the stem of a large kind of grass. It was tough and flexible, although the broken ends had sharp edges. Another native doctor said that he could recognize diabetes among the workers in the teak forests. He pointed to sugar-eating ants collecting around the urine of one of them. It is needless to say that he did not understand the explanation of the disease, nor could he cure it.

The few missionary doctors in Siam from 50 years to a century ago performed heroic service. Their dispensaries were crowded. One of the first, Dr. Bradley, vaccinated one man from another, but after a time regularly received a supply of vaccine enclosed in wax. These missionary doctors eliminated smallpox and distributed large quantities of quinine for malaria. One doctor going up country was gored by an elephant that carried him. By the aid of his shaving mirror and his medical kit while lying in the jungle, he sutured the tear in his own abdomen. No foreigner was with him. He practiced in Siam many years thereafter.

The Rockefeller Foundation some twenty years ago initiated a medical program in Siam. Its International Health Board brought into the country several American specialists in public health; and Siamese doctors were sent to its school of public health either at Harvard or Hopkins. A public health service was organized with a Siamese prince trained in medicine at its head. As an entering wedge an intensive campaign of education about the hookworm was waged. This disease was chosen because its etiology could be easily demonstrated to the skeptical. Boats carried parties up the rivers with demonstration microscopes, lantern slides and posters. The abbots of each monastery and the local officials were shown hookworm larvae. The scope of the movement was then expanded. I have a photo of a poster showing an elephant looking into the window of a house. Flies are buzzing about the room. The housewife is running away from the window. The poster says: "She is frightened by the elephant, but does not realize that flies are a greater menace."

The Department of Medical Education of the
(Continued on page 35)

DIAGNOSIS AND MANGEMENT OF FOREIGN BODIES IN THE ESOPHAGUS

Harold Wesley Anderson, M.D.

*Assistant Laboratory Instructor in Pathology,
The Chicago Medical School*

Discussion

1) It is important that the general practitioner, because of the frequency of foreign bodies in the esophagus and the graveness of the complications, should have a complete understanding of the correct diagnostic procedures which can conclusively clinch the diagnosis of a foreign body in the esophagus.

2) Equally as important as the diagnosis is the management, consisting of first, the prophylactic care to be given in prevention of a complication such as esophagitis, peri-esophageal abscess, localized mediastinitis, and diffuse mediastinitis, all of which are severe enough to cause a high mortality rate. Secondly, disposal of the case to the management of a skilled endoscopist for extraction or active therapy. Thirdly, post-extractive care to prevent the aforementioned complications.

Etiology

Foreign bodies lodged in the esophagus occur most frequently in both extremes of life because of the following two main factors. In children—because they are invariably putting foreign bodies into their oral cavity and swallowing same. In adults who have upper dentures, false plates, in which case foreign bodies such as chicken, fish and beef bones are ingested with food; and the individual is unable to experience pain in the oral cavity because of the intervening upped dentures between the foreign body and the soft and hard palate.

Anatomy

A few anatomical details concerning the anatomy of the esophagus are important at this point. First and most important is the fact that the esophageal walls are exceedingly thin and delicate and require the most careful manipulation. Because of this delicacy of the walls and the fact that the esophagus is never sterile, surgical procedures are associated with infective risks. For some other and not fully understood reason, the esophagus is surgically speaking one of the most intolerant of all human viscera. The length of the esophagus varies; in infancy it averages 20 centimeters, in adults, 40 centimeters; this measurement is from the upper incisor

teeth. The diameter varies greatly because of its elasticity. The esophagus possesses four demonstrable constrictions; namely:

- 1) The crico-pharyngeal fold
- 2) The crossing of the aorta
- 3) The crossing of the left bronchus
- 4) The hiatus esophagus

A definite fifth narrowing of the esophageal lumen not easily demonstrated esophagoscopically and not seen during dissection, but readily shown functionally by the fact that almost all foreign bodies lodge at this point, is known. This narrowing occurs at the superior aperture of the thorax and is probably produced by the crowding of the numerous organs which enter or leave the thorax through this orifice. The anterior wall of the esophagus is in part of its course in close relationship to the posterior wall of the trachea and this portion is called the party wall.

Symptomatology

Pain. A patient having swallowed a foreign body which is lodged in the esophagus exhibits some degree of pain usually referred to the thorax at the level of the obstruction or lodgement of the foreign body. The pain is deep-seated and aggravated upon swallowing. Ulceration in the pharynx, hypopharynx and along the esophagus caused by the passage of a foreign body may also elicit pain of varying degrees.

Dysphagia. Self-explanatory. Due to obstruction of the food passage.

Cough. Prominent when pressure of the foreign body excites the cough reflex of the pulmonary tree. This is true particularly when the foreign body is lodged in that portion of the esophagus called the party wall.

Cyanosis. Only present in cases where there is a compression obstruction of the pulmonary tree or where mediastinitis, local or diffuse, is present.

Excessive salivation. May or may not be present.

Laking of saliva. Especially in high obstruction. This is seen on inspection of the hypopharynx with laryngeal mirrors.

(Continued on page 32)

SOME PROBABLE PHYSIOLOGICAL MECHANISMS IN PSYCHOSOMATIC DISEASE

Don Shoemaker

*The centipede was happy quite
Until the frog, for fun,
Asked, "Pray, which leg comes
after which?"*

*Which wrought his mind to such a pitch
He lay distracted in a ditch,
Considering HOW to run.*

—Selected

In a recent paper this writer defined the field of psychosomatic medicine as that branch of medical practice which deals with the interrelationship of psychic disturbances and disease. Many investigators are presently engaged in the study of these diseases in which emotional disorders are considered etiological factors. This paper presents some of the evidence for the psychogenesis of organic lesions.

In medical practice today no distinction between body and mind is acceptable. It is recognized that the difference between psychology and physiology is simply one of complexity; the obscure physiological processes involving the higher levels of neural integration entail complex methods of study—and offer a challenge to the ingenuity of the investigator.

Cobb says: "I solve the 'mind-body' problem . . . by stating that there is no such problem. The dichotomy is an artefact; there is no truth in it, and the discussion has no place in science. . . . Metaphysicians can argue the problem *ad nauseum*, and their nausea will be the proof of their futility."¹

The literature reporting experimentation by various investigators of psychosomatic mechanisms agree in general that emotional and psychic disorders produce tissue alteration by disturbance of autonomic function. Irritation of the vegetative system follows by means of impulses of unusual intensity or rhythm along the involuntary nerves. Through the latter the irritation is transmitted further in diverse ways, in accordance with the individual's disposition and organic peculiarities.² Before discussing the processes involved, it may be well to review briefly the autonomic nervous system and its relation to organic function.

The autonomic system is made up of the craniosacral (parasympathetic) and the thoracolumbar

(sympathetic) systems. The cranial group has many activities. The vagus nerve controls the slowing of heart rate, constriction of the bronchi, contraction of the stomach and intestine and relaxation of the sphincters, and the secretions of the stomach and pancreas. The glossopharyngeal and facial nerves carry fibers controlling secretion of the salivary and lacrimal glands. The facial nerve also "furnishes" vasodilator fibers going to the cerebral and meningeal arteries by way of a branch off the chorda tympani.

The functions of the thoracolumbar division include the dilation of the pupils, secretion of sweat, erection of hair, vasodilation and vasoconstriction, acceleration of the heart, dilation of the bronchi, contraction of the sphincters of the anus and vagina, and inhibition of intestinal peristalsis. The inhibition of bladder contraction with the contraction of its sphincter, the stimulation of the conversion of liver glycogen into glucose and the discharging of red blood cells by the spleen also come under the thoracolumbar division. It will be understood that the activities mentioned here are only the better known functions of the autonomic nervous system.

The hypothalamus has been suggested by many investigators as the center of emotion. This theory seems to be confirmed by such experiments as those of Ranson. By stimulation through electrodes placed in the hypothalamus, Ranson was able to produce the symptoms of intense emotional excitement in animals—sweating, biting and erection of hair. Grinker also by stimulation of the hypothalamus in man caused sympathetic effects on blood pressure, pulse rate, and produced anxiety symptoms, accompanied by crying. And Alvarez has mentioned "hypothalamic storms" in relation to hysteria symptoms in his "patients."³

However, the work of Masserman (1942) tends to show that the symptoms experimentally obtained were mechanical and stereotyped, and left none of the usual aftermath of emotional upset. Actually, the motor expressions of emotion were obtained, without any real feeling being present.⁴

It now seems apparent that the hypothalamus is a motor way-station where emotional expres-

sion is integrated into behavior patterns on its way out to the muscles, blood vessels, and glands. Feeling, the essence of emotion, takes place elsewhere. The problem is one of awareness—at which level does the animal or man become aware of his sensory stimuli? Cobb believes that most evidence points to the thalamus in man as the center of awareness in a rudimentary way, and in a more discriminative way the cerebral cortex. He concludes that "the continuity of feeling with all its reverberating aftermath of strong emotion must be kept up by the thalamo-cortical circuits."

It is well known that emotional disturbance often results in neurotic and psychotic behavior. But besides this motor activity so apparent to the observer, there is the behavior of smooth muscle and glands. Through these media the autonomic nervous system expresses emotion in heart rate changes, blood vessel volume changes, and in glandular malfunction.

The facial grimaces of rage and fear are quite different from the facial expressions of love and sorrow. The effects upon the viscera of these major emotions are also quite different. Some of these changes are demonstrated in the work of the following investigators.

In 1942 Wolff and Wolf published conclusive evidence that emotional factors, by altering autonomic function, could produce gastro-intestinal ulceration. They observed, over a period of some months, the daily changes in the gastric mucosa of a patient through an artificial opening in the stomach wall. They found that when the patient was anxious and resentful, there was increased motility and acid secretion, and the mucosa appeared, and soon a distinct ulceration occurred—which promptly healed when the psychic disturbance was removed. Wolff and Wolf were able to show a complete chain of events beginning with anxiety and emotional stress and ending in gastric ulcer.⁵

In a study of 60 mucous colitis patients, White and others (1939) found that the sigmoidoscope picture was recognizably abnormal in 89 per cent of the cases, but the changes were only those of chronic irritation.⁶ These changes ranged from slight injection spasm and mucous secretion to marked injection and presence of dry tenuous mucous, which peeled off the mucosa and left small granular indentations in its wake. They then produced identical pathology in normal stu-

dents by experimental irritation; one method used was the oral administration of acetyl-beta-choline chloride.

In order to study changes in the colon during experimental activity, White and Jones observed by sigmoidoscope the reaction of the mucosa in students in response to various emotional stimuli. They found that the mucosa tended to bleach under certain stimuli, and to blush under others. They once observed, while looking into a sigmoid flexure of a male student, the mucosa blush violently when a young woman entered the room.

In all but four in this series of 60 patients psychogenic factors were discovered. Reduced energy output, easier fatigability, and a high incidence of sexual indifference were characteristic in these patients. It was not possible to differentiate the patients into sympathico-tonic or vago-tonic individuals; there appeared rather a dysfunction of the whole autonomic system than a hyperfunction of either component alone.

Curtis says "In summarizing these findings, the authors (White and Jones) express the belief that mucous colitis is a physiological disorder of the colon brought about through the action of the parasympathetic nervous system, wherein the development of the localized changes is predisposed by certain physiological and pathological states in the human organism.

"The commonest source of parasympathetic overstimulation in patients with mucous colitis is emotional tension, and there are certain specific characteristics in the personality which appear to predispose to the development of this tension. These characteristics are overconscientiousness, dependence upon the opinions of others, and sensitivity."

In 1944 Alexander and Portis reported a study of the glucose tolerance curves upon 26 normal individuals and 31 neurasthenics. They found that the asthenic syndrome appeared with a pronounced flat sugar tolerance curve. (Neurasthenics: 31 per cent rise in curve; Normals: 70 per cent rise in curve.) Their hypothesis is that the emotional tension ordinarily referred to as zest or interest keeps up a certain tonus in the vegetative innervations, and a certain balance in the sympathetic adrenal and parasympathetic insular tonus.

"In certain emotional situations characterized by a loss of spontaneous zest and a revulsion

(Continued on page 32)

MICROSCOPIC TECHNIQUE

Dr. Percival Plotz

THE modern microscope is a complex, precision-built, optical instrument which is difficult to obtain at present. This makes it imperative that those microscopes now in use be conserved by means of proper handling. Correct microscopic technique not only prolongs the life of the microscope, but also obtains better results.

The microscopist should first thoroughly acquaint himself with his particular instrument, be it a Spencer, Bausch & Lomb, or Leeuwenboek model. Every microscope works upon the same principle, and the parts that are essential for its functioning are:

Oculars. These are of different magnifications, are slipped into the top of the microscope, and are always dusty.

Body tube. This separates the ocular from the objective, causing considerable frustration.

Draw tube. This tube holds the ocular, and fits snugly into the body tube. The draw tube can be slipped in and out of the body tube when the laboratory work becomes boring. It has never been established as to whether either tube derives any pleasure from this, and the usefulness of the draw tube is, therefore, questionable.

Revolving nosepiece. This ingenious device usually holds three objectives. One is kept on the job, while the other two stare at the laboratory technician's ankles across the room.

Objectives. To capture the pillbox commanding the road junction, and to neutralize the machine-gun emplacement at location 16-29.

Stage. A handy place to put the slide, make dissections, doodle in chalk, and crack nuts.

Stage clip. A flat, elongated, chromium-plated piece of metal, somewhat convex superiorly in a transverse plane, rigidly brazed to a vertical, cylindrical pinion with a uniconvex, disc-shaped, circumferentially notched head, and fitting into a single-bored shaft with a small tolerance.

Abbe condenser. Self explanatory.

Mirror. This is on both sides of it one. The plane mirror is to be used when the silver on the convex mirror wears off.

Substage diaphragm. After a strong, well distributed light is obtained in the field, the diaphragm can be used to cut down the light so that something can be seen. Nothing will be, however,

so it should be opened again.

Skylight, preferably from the north, is an excellent source of illumination, but since it is not often available or convenient, artificial light is usually used. A small electric heater has been developed for this purpose called a Substage Lamp. This emits a wan, flickering glow through a small window that is placed at a level either too high or too low for the mirror. The author has found, however, that the microscope can be adapted to this lamp if a few minor changes are made. These include removal of the stage and condenser, horizontal mounting of the tube, and an arrangement of special lenses, the whole setup being immersed in a mixture of crushed ice and brine.

In using the microscope, the object should always be examined under low power first, then under the higher powers of magnification. This gives the observer a sort of preview of what to expect and minimizes the shock.

Focusing upon the object is the most crucial and most abused operation in microscopic work. In the first place, the tube should never be racked *down* on the object, but should always be racked *up*. This is especially true when the oil immersion objective is used. The tube must be lowered as far as possible, and then raised slowly by coarse adjustment while the field is being observed for the object. If the plane of focus is passed unnoticed, the tube must again be lowered and racked up slowly. A whole lovely afternoon can be spent this way.

While the tube is being lowered to the starting point, the head and eyes should be held at the level of the stage, and the objective watched closely as it crunches through the cover glass. This spectacular treat is completely missed if the field is being observed at the time.

Sometimes a stained smear can be seen easily under the low and high power dry objectives, but cannot be found under the oil immersion lens after innumerable trips up through the oil. The oil should be wiped off the slide, and the slide turned over, for the smear is on the other side. This happens to even the best of technicians, as the author can personally attest.

After using oil, the objective should be cleaned thoroughly. This can best be done by dropping

the objective into a beaker of xylol, and allowing it to soak overnight. The supernatant liquid is then poured off, and the residue is sent back to the factory to be reassembled. Because of the war, the more recent method has been to allow the oil to collect on the lens for several weeks. It is then scraped off into a clean, wide-mouthed, tin can (a glass jar will not do) and, after one pound or more has accumulated, is sold to the neighborhood butcher for conversion into glycerine.

The microscope should always be tilted at a rakish angle when in use. The public expects it. A vertical microscope is definitely bad taste—*le goute pfui*. It distinguishes the high-school biology student from the research worker. Nor are hanging drop slides and wet preparations valid excuses for reverting to verticalism. The technician who is worth his salt will be able to overcome such trifling difficulties.

Then there is the controversy about the advisability of keeping both eyes open while looking through the microscope, instead of squinting through one eye. This problem is solved by using a binocular microscope with which one must keep both eyes open to get one's money's worth. Two fields are usually seen at once by the beginner using this type of microscope, but by adjusting the distance between the two oculars, or by crossing the eyes, or more effectively, by shutting one eye, this difficulty can be overcome. This leaves one eye closed again, which proves that the binocular microscope is a waste of money.

Microscopes should be covered when not in use, and should be kept dust-free. They are not to be handled roughly when they are put away or taken out. It may seem like great fun to flick cigarette ashes into the draw tube of a colleague's microscope while he isn't looking, and kill his blood count, but his microscope is not improved by such pranks. However, if such antics *must* be resorted to in order to relieve the tension of work, the author suggests the use of emery dust instead of ashes. It blots out the field better, and the damned stuff can *never* be cleaned out.

The rules of conduct in the laboratory include the following *don'ts*:

Don't spit into the microscope case. Fine, imprisonment, or both or neither.

Don't use the microscope as a weapon. Scal-

pels are provided for this purpose, and should be returned to their proper place when not in use.

Don't pour acids or caustic solutions on the microscope. A light sponging with warm Epsom salt solution, followed by a brisk alcohol rub, should keep it in good shape.

Don't playfully clout a fellow worker on the back of the head while he is peering into his microscope. He will come up with a surprised look in one eye and a ten power ocular in the other. This really adds dignity to his appearance, and is especially useful if he ever becomes a jeweler. However, he may object by screaming and writhing on the floor or chair or table or almost any surface suitable for writhing. A first aid guide should then be obtained, and the section on *Removing a Foreign Body from the Eye* or *Removing the Eye from Around a Foreign Body* should be consulted, as the case may be.

In conclusion, the author wishes to point out that the limits of usefulness of the microscope have not yet been reached. There are still new lands to conquer under the microscope for some young, energetic investigator. It is the author's fond hope that some day one of his disciples will finally and conclusively prove or disprove, to the author's satisfaction, the Germ Theory of Disease.

"How guilty is the physician who guarantees that he will cure a disease. For then he would change the possibility which is found in Nature, and would convert it to certainty."

* * * *

"The better you learn to know the temperament of the patient, and his characteristics in the time of his health, and the more frequently you feel his pulse and inspect his urine, the easier it will be for you to treat him."

* * * *

"Honor a physician with the honor due unto him, for the uses which ye may have of him, for the Lord hath created him . . . and he hath given men skill, that he might be honored in his marvelous work . . . My son, in thy sickness be not negligent . . . Give place to the physician . . . Let him not go from thee for thou hast need of him."—Serach.

* * * *

There is a case of an Irish girl (age 23) (1879) who felt a desire to urinate, and "while seated on the chamber, dropped a child."

Student Council Lecture Series

Through the activity of the Student Council a plan for a series of lectures by famous men in Medicine was recently inaugurated at The Chicago Medical School.

Oct. 4—

The first of the guest speakers, introduced by Dr. Sheinin, was Dr. William F. Windle, Ph.D., Director of the Neurological Institute of Northwestern University Medical School, who spoke on the relationship of anoxia in the newborn to degenerative changes in the nervous system.

Much was written theorizing why many infants were born apparently normal and fully developed, and yet failed to breathe at birth or had ceased respiratory activity shortly before delivery. The causative factor was believed to be the anesthetic used at birth. However, few experiments were carried out to prove the theory. Dr. Windle and Dr. Becker discussed plans for an experiment to prove the effect of late fetal anoxia on the nervous system and to determine whether enough brain damage is done to result in mental deficiency. The plans were formulated and the experiment was carried out using guinea pigs, since these animals have a hemo-endothelial type of placenta and a fetal survival time during anoxia resembling that of man.

A film was shown of the work performed on the animals, the induced anoxia on the foeti of from 4½ to 21 minutes in duration, and the later caesarian delivery. There were evidences of structural degenerations in the animals asphyxiated for more than eight minutes. Multiple capillary hemorrhages were observed. Edema was present in all animals from 4 to 8 hours after resuscitation, disappearing, however, after 5 days. Degenerative changes were observed in the nerve cells of all asphyxiated guinea pigs and the most frequent sites of damage were the thalamus and spinal cord. The brain showed generalized or regional atrophy.

The experiment showed that asphyxia during birth produces central nervous system degenerations, and that there is a relationship between the duration of asphyxia and the amount of nervous tissue destruction. The results of this experiment can be compared to conditions at human births, and asphyxia can be often used to explain

the incidence of dullards and children of inferior mentality in families with a high intellectual level.

Oct. 18—

The second guest lecturer was Dr. Frederick Tice, M. D., Emeritus Professor of Medicine of the University of Illinois College of Medicine. After an introduction by Dr. I.S. Neiman, Dr. Tice spoke on "Sulfa Drugs, Penicillin and Blood."

A comparison was made between the treatment of pneumonia during the last century and today. Dr. Tice, who served his internship at Cook County Hospital 50 years ago, described what was done to a patient with pneumonia in those days. The disease was more prevalent then and it seems to have undergone a change in recent times. Today the temperature does not soar as high; one seldom sees the phenomenon known as the "crisis." The disease, the symptoms and the treatment have all changed. Fifty years ago the "Open Air Treatment" was practiced and the patient was moved out on the porch, even during the coldest winter nights. Quinine, in massive doses was tried. For a while the Aconite treatment was used. But these methods were of no avail. The mortality rate was very high. Today, pneumonia is no longer feared because of the remarkable strides made in medical science in recent years. The course of the disease is not allowed to progress as far as it had in previous times, and the great toll taken by pneumonia has been diminished.

Dr. Tice spoke of the work done by Steinberg, Waxelbaum, Neufeld and Sabine to clarify the picture of pneumonia and to understand the disease thoroughly. Because of constant research, curiosity and the desire to solve a difficult problem, medical science has produced a powerful weapon against pneumonia—Sulfa drugs.

At present there are over 200 sulfa preparations in existence of which 8 are used clinically. The first to appear was sulfanilamide and it is used very much today. The sulfa drugs, however, are still not fully appreciated and many unpleasant and unwanted reactions may occur from their use. The drugs should be used with care and precaution. They have one advantage and that is they can be given intravenously, orally and applied topically.

Penicillin — This is a recent drug, discovered by Fleming in 1929 and isolated by Flouray in 1938. The drug is comparatively non-toxic, although not entirely without harmful effects. When administered subcutaneously, chills, fever, tenderness and an abscess may result. Penicillin can be given intravenously and intramuscularly. Topical application is effective, but when given orally the drug does not act.

In the body the maximum titre is reached in fifteen minutes, 50% is excreted by the kidneys in the next fifteen minutes. An hour later the titre falls to one quarter, and in the following hour all the drug has left the body.

To prolong the effects of penicillin, various substances such as diodrast, protamine zinc, peanut oil and cotton seed oil are injected with the drug. This delays excretion and the therapeutic level is maintained for twelve hours.

The comparative value of sulfa drugs and penicillin was described. Some of the diseases curable with sulfa therapy are pneumonia, gas gangrene, gonorrhea and bacillary dysentery. Sulfa drugs are ineffective in tuberculosis, typhoid, valvular heart disease, virus infections and malaria.

Penicillin is effective in pneumonia, meningitis, osteomyelitis, gas gangrene, primary syphilis, gonorrhea, boils and carbuncles. It is ineffective in tuberculosis, typhoid, valvular heart disease and fungus infections.

Dr. Tice next spoke of the old and modern methods of blood transfusions and blood storage. The use of blood plasma, its dehydration to form crystals and then its dissolution in distilled water were described. The redissolved plasma was found to be just as efficient as the original.

Thrombin and fibrinogen have been concentrated into a fine, white powder called "Fibrin" from which foams, films, plastics and glue are created. The foam is made into a "Sponge Pack" and is very useful in surgery since it can stop a hemorrhage immediately. Fibrin film is used to replace bone temporarily. It is inserted where the bony tissue has been excised and is itself slowly replaced by new bone formation. Fibrin glue is used in plastic surgery for skin transplantation. The glue is applied over a denuded area and a thin section of skin is placed over the glue. There is no bleeding and no pressure is needed on the freshly applied tissue. In a short time the skin becomes adherent.

Formerly when blood was withdrawn from the body for its plasma the red corpuscles were thrown away. This was a great waste since 46% of whole blood is composed of blood corpuscles. Today the blood cells are suspended in saline and have been used in transfusions with excellent results.

Red blood cell paint was produced in New York. It is applied externally on chronic lesions and varicose ulcers resulting in prompt healing. In the Mayo Clinic, red cell powder, instead of paint, is used to dust the ulcer, giving better results than the use of the paint.

The reports of these new discoveries and their successes are astonishing achievements of modern medical science.

Nov. 3—

Dr. Karl A. Meyer, M. D., Associate Professor of Surgery of the Northwestern University Medical School was the third speaker of the guest lecture series. Dr. Meyer was introduced by Dr. Christofferson.

The speaker chose the problem of cancer of the colon and rectum as his topic. He prefaced his lecture by the advice that there is no basis for medicine better than the study of Anatomy, Pathology and Surgical Pathology. A surgeon has to depend upon his own knowledge and study to be an adequate judge of a problem in surgery. He has to be practical, and above all a good clinician.

When a patient is told that he has a cancer of the colon or rectum, he invariably loses hope for recovery. The patient should be informed that he has a 50% chance for a ten year cure if there are no glandular metastases. A carcinoma of the rectum or cecum will respond to curative treatment more readily than a carcinoma of the breast or stomach.

There usually are no early diagnostic symptoms in cancer of the large bowel. However 80% of the lesions of the colon are either in the rectum or the recto-sigmoid region and therefore can be recognized easily by a digital examination. This type of examination alone will give a diagnosis in only 60% of the cases; therefore it is preferable to examine the lower bowel both digitally and with the use of a Sigmoidoscope.

Before the operation is performed, the physical condition of the patient is studied. Examinations are made for anemia, blood protein, and infective

(Continued on page 34)

ENTERIC CENTER OF THE CHICAGO MEDICAL SCHOOL

Eugene Rosenfeld
Marvin Lerner, *Photography*

THE war has brought about great changes in our lives. It has resulted in the wide distribution of our soldiers as well as a great shift in our populations causing an ever increasing incidence of communicable enteric diseases.

In order to facilitate the diagnosis and treatment of these gastro-intestinal diseases, the Chicago Medical School has added a specialty clinic to the services now being rendered, and has established an enteric center under the direction of Dr. Oscar Felsenfeld, assisted by Miss Viola Mae

Young and two volunteers, Miss Hills and Miss Routin.

The typing and identification of *Salmonellae* and *Shigellae* requires a hundred different sera as well as special facilities and personnel not readily available to the average laboratories. A cooperative international organization has therefore been created with the American headquarters at the Kentucky Agricultural Experiment Station under the leadership of Dr. P.R. Edwards, its founder and director.

Other minor stations have been established at: Hartford, Conn. under the guidance of Dr. F. L. Mickle, in cooperation with Brown University. Albany, N.Y., directed by Miss Colemann.

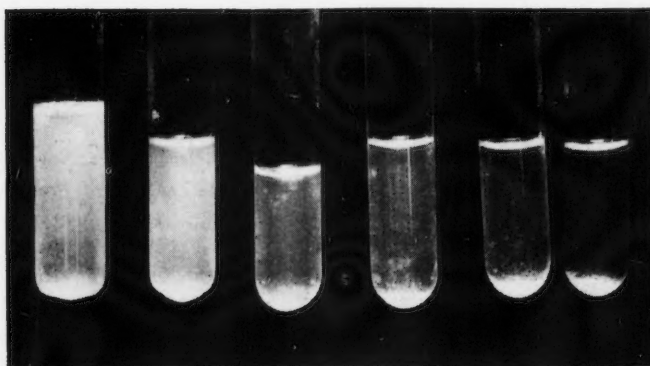
Beth Israel Hospital, New York City, supervised by Dr. Seligman. Here, only the human varieties of organisms are typed.

Private centers without state support exist at the Southwestern Medical Foundation under Dr. MacDonald Fulton and at The Chicago Medical School, supervised by Dr. O. Felsenfeld.

In the United States there are three "Amoeba Centers," one at Tulane University, the other located in Philadelphia, the third at the Chicago Medical School.

In addition to the above, our center also diagnoses other parasitic intestinal infestations. Within the past month requests for 28 cultures for ex-

(Continued on page 35)



Top left hand—"Fishing" Colonies

Lower left hand—Dec plate streaked with fecal material.

At right—Tube agglutination.

ENTERIC CENTER
of
The Chicago Medical School

Eugene Rosenfeld
Marvin Lerner, *Photography*

Lower left hand—

Intestinal Vibrios

Lower center—

Staining Fecal Smear for Protozoa

Top right hand—

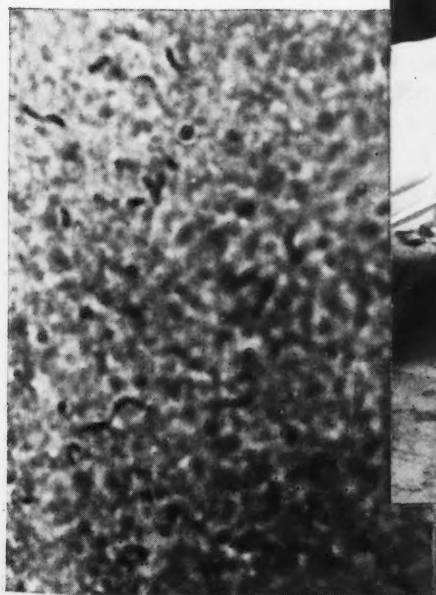
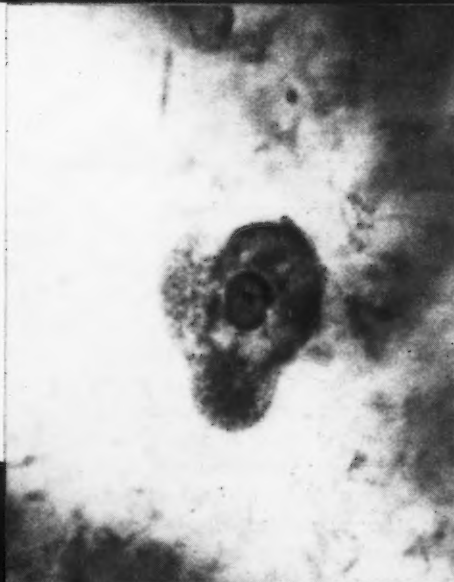
SS Plate Streaked with Fecal Specimen

Second right hand—

Endamoeba Histolytica

Third right hand—

Preparation of Rabbit Immune Sera



Alumni News

1920—Dr. Boyd C. Rembe died at the Mother Cabrini Hospital on September 28, 1944. He was a graduate of The Chicago Medical School, in the Class of 1920. Dr. Rembe enjoyed a successful practice in Chicago for many years, and it is with great sorrow that we learn of his death.

1926—The Quarterly regretfully announces the death of Dr. Calvin A. Eaton on September 3, 1943. Dr. Eaton graduated from the Chicago Medical School in 1926. His death came as a result of pulmonary embolism. Dr. Eaton had an outstanding practice in Yuma, Arizona which exemplified his prominent position in his community. We extend our deepest sympathies to his family and friends.

1927—It is encouraging to learn that Dr. John J. Lazama, Sr., is fully on the road to recovery. Dr. Lazama, now residing in Lemay, Missouri, left his practice in Cicero and Berwyn, Illinois, because of poor health. His son, Dr. John J. Lazama, Jr., graduated from the Chicago Medical School in 1936, and is now a captain in the Medical Corps.

1929—The Quarterly proudly announces the citation of the Silver Star Medal for courageous achievements at Pointe Du Hoc to Captain Wattes Block. Capt. Block, while serving with the American Rangers, carried out his duties for 66 hours while under a concentrated hail of German gunfire, evacuating 50 Yank casualties.

1932—Captain Felix R. Balin is now at the Station Hospital at Camp Stoneman, California, and would enjoy hearing from his former classmates.

1933—Major Allen R. Morrison is now serving with the 39th Medical Battalion. Major Morrison would also like to hear from his old classmates. How about it, doctors?

While in Chicago, Capt. Franklin P. Le Van of the Medical Corps paid his respects to Dr. Sheinin and his many acquaintances here at school.

1934—Word comes to us that Lieut. Mario Limonelli was severely injured and is hospitalized at the Gardiner General Hospital here in Chicago. We extend our sincerest wishes for a very speedy recovery to you, Dr. Limonelli.

Capt. Charles Hubner has been wounded in France. We sincerely hope that the time elapsed between our receiving this news and the reading of this Quarterly finds Capt. Hubner completely recovered.

Many thanks to Lieut. Edward J. Allen for paying us a very welcome visit while in Chicago between trains. Lieut. Allen has been stationed in the North Pacific, and is now enroute to a new assignment.

Lieut. Andrew Krajec is in the Army Air Corps overseas since January, 1944. Lieut. Krajec has been in the service since October 29, 1943.

1935—The Silver Star Medal for gallantry and the Purple Heart Medal for Wounds was awarded to Capt. Murry M. Paull. Capt. Paull was a member of the Woodlawn Hospital before entering the service two years ago. The Quarterly takes great pride in making such an announcement.

It is a certainty that the prisoners at the Prisoner of War Camp, at Brady, Texas are getting the finest medical attention. Capt. Robert Adelman is doing more than his bit there.

1936—Busy as he is in southern France, Dr. Joseph Chytnic found time enough to write, "Regards to all in Chicago and all alumni of the school."

While on emergency furlough, Major Hood visited The School. Major Hood is a Transport Surgeon and "has done the Pacific thoroughly."

Capt. Bernard E. Bolotoff was honorably discharged from the Army Medical Corps because of illness contracted while serving in the Southwest Pacific. He is returning to practice in Rockford, Illinois. The Quarterly extends its best wishes to Dr. Bolotoff for the resumption of a successful practice.

Dr. J. I. Wechsler has recently been commissioned a First Lieutenant, and is leaving for the army.

Greetings to the Quarterly from Dr. Nathan Mann in the form of a very welcome renewal subscription. Dr. Mann is now residing in Oakland, California.

1937—Dr. Sheinin informs us that he has received a letter from Capt. Samuel C. Noto, M. C. Capt. Noto is a Medical Air Evacuation Officer located somewhere overseas. In short, concise form Capt. Noto tells us that we will attain our "proper place in the field of "Medical Education," and once again expresses his faith in The School

by making another contribution to the Endowment Fund. We here in Chicago say in chorus, 'Thank you, Capt. Noto. We shall and will reach our goal, not soon in the future, but now in the present, with the help of you and scores of other alumni, friends and students of the school.'

It is indeed an honor to put in print the outstanding and courageous actions of Capt. Charles L. Hurwitz. Capt. Hurwitz has been awarded the Bronze Medal for the performance of outstanding medical services with the 43rd Division in the Southwest Pacific. A dispatch from the General Headquarters Public Relations office states:

"During the period it was necessary to carry 13 seriously wounded litter cases on the march. Capt. Hurwitz performed prodigious feats in treating and caring for the wounded under impossible conditions and with limited equipment." Capt. Hurwitz is a veteran of the 1943 New Georgia campaign in the northern Solomons.

Capt. A. W. Wellstein is doing general surgery in New Guinea. He sends his regards to everyone.

Capt. Morris Rothenberg is at present on the Post Surgeons' staff at Fort Sam Houston, Texas, and finds himself being kept quite busy.

The Cause of Gastric and Duodenal Ulcer, Medical and Surgical Treatment; this was the topic of a lecture by Dr. D. Cook at a meeting of the Southern Cook County Branch Chicago Medical Society on October 17, 1944.

1938—Having already participated in two campaigns is saying quite a bit for Capt. L. Greenberg. Capt. Greenberg writes that army medical life is much different than that in civilian life and "would like to return to our former way of living." We are with you, Captain!

Capt. J. M. Epstein sends his regards to all. Sure thing, Capt. Epstein.

1939—Captain Carl N. Graf, after graduating from the School of Aviation Medicine at Randolph Field, is now stationed at Greenville, South Carolina.

Captain Morris Fox, who is now stationed at the Winter General Hospital, Topeka, Kansas, visited school while in Chicago.

1940—By way of V-mail, Captain Lee Gladstone sends word that he is the co-member of a surgical team attached to Chinese troops in Burma. His unit, a basis for civilian surgery, has had to cope with the many medical problems encountered

in this part of the world, where malaria and dysentery are very common. His present address is; C. D 13th Med. Br. A.P.O. 0.689, c/o PM, N.Y., N.Y.

1941—Captain Morris D. Bennin is now carrying on as chief of the Eye, Ear, Nose and Throat section at a hospital in England. He is stationed at 307 Station Hospital, A.P.O. 514-A N. Y., N. Y.

Congratulations to Captain and Mrs. Lee Tann on the birth of Jane Carol, a 6 lb-8 oz. baby girl.

Captain Lee Delano Richey, who was practicing in Elgin at the time of his commissioning in the Army Medical Corps, is now the surgeon attached to the portable hospital of the 31st Infantry division. Captain Richey, in need of a pump to clean out an injured soldier's lungs, developed a portable suction pump out of salvaged materials, which meets the needs for a hospital aspirator. With this pump he has been successful in saving many lives. Congratulations, Capt. Richey.

Lieutenant Oscar Simon writes he is enroute "Somewhere in the Pacific," and would like to hear from his classmates. His present address is Lt. O. Simon, M.C. (0541676) 176th Station Hospital, APO 5799 c/o Postmaster, San Francisco, California.

Congratulations to Lieutenant I. A. Smith who has just been promoted to rank of Passed Ass't. Surgeon. He writes, "I have been at sea for a little over a year now on this vessel, and I find that sea duty is good duty once you can overcome the fear of *mal de mer*."

Thanks to Captain Frank Warner for his renewed subscription to the Quarterly. Captain Warner is now in charge of a mobile laboratory section overseas. His address is 0-503015, Second Med. Laboratory, APO 464, c/o Postmaster, N.Y., N.Y.

1942—Although in service only a short time, Lieutenant Joseph Liebross said recently, that his duties have already carried him around the world.

Greetings have been received from Lieutenant Abraham Schwartz. Lieutenant Schwartz's new address is Regional Hospital, Ft. Riley, Kansas.

We are informed that Lieutenant Samuel Sty-macin's correct address is now 190 General Hospital, Camp Barkley, Texas.

Word has been received that Lt. Seymour Wishnick is now a patient at the Walter Reed Hospital after having been injured. We hope

that he is well and on his feet again long before he receives this issue of *The Quarterly*.

Lt. Irwin L. Greenspan informs us that he is now stationed at Pittsburg, California.

Dr. Sidney Raymon, now a member of the U. S. Public Health Service, is the medical officer on the training ship "American Pilot," Ft. Schuyler, Bronx 61, N.Y.

Lieutenant Leroy Levitt still awaits the latest publication of the *Quarterly*. He is now stationed at -0556053-Camp Hill Dispensary B, Hampton Roads, Port of Embarkment, Newport News, Va. It's on its way, Lieutenant.

Best of luck to Doctor and now Lieutenant Sol Nichtern who was recently married to Miss Claire Joseph of New York.

Lieutenant Rudolph Bromberg, M.C., was among the recent visitors to *The School*.

Congratulations and best of wishes to Dr. Burton J. Winston who has just opened an office at 1800 North Sheridan Road, North Chicago, Ill.

Captain Edward Franklin Stephens, Jr., is now doing his part in the Southwest Pacific war area.

Dr. Ralph C. Rudder has just announced the birth of a baby girl, Susan. Best of health to you and yours.

Lieutenant George N. Chucker, M.C., after spending 6 weeks at the Carlisle Barracks, Penn., is now serving in the Fitzsimmons General Hospital, Denver, Colorado.

1944—Good luck in the future to Sallie Jane Major who on September 25, two days after graduation, became the wife of Dr. Thomas Carroll Tyrrell.

Capt. Benjamin H. Lerner, Assistant Professor of Anatomy is stationed at the AAATC Central Clinic at Camp Stewart, Georgia.

NEW COMMISSIONS

Lt. Eugene Raicus, M.C.	CMS	March 1943
Lt. LeRoy Levitt, M.C.	CMS	March 1943
Lt. Sylvan N. Surks, M.C.	CMS	March 1943
Lt. Sol Nichtern, M.C.	CMS	March 1943
Lt. Rudolph Bromberg, M.C.	CMS	March 1943
Lt. Abraham Rottkov, M.C.	CMS	March 1943
Lt. Herbert V. Fine, M.C.	CMS	March 1943
Capt. Robert Adelman, M.C.	CMS	1935
Lt. Edwin J. Allen, M.C.	CMS	1934
Lt. David Friedman, M.C.	CMS	1943
Lt. (j.g.) Harry F. Kaack	CMS	1943
Capt. Hayden E. McKay, M.C.	CMS	1936
Lt. George N. Chucker, M.C.	CMS	March 1943

Lt. Joseph Liebross, M.C.	CMS	1942
Lt. John Horkaavy, M.C.	CMS	1941

PROMOTIONS

Capt. Lee Gladstone, M.C.	CMS	1940
Capt. Franklin F. LeVan, M.C.	CMS	1933
Major Allen R. Morrison, M.C.	CMS	1933
Capt. Gilbert Shoger, M.C.	CMS	1939
Capt. Isaac E. Bartlett, M.C.	CMS	1939
Major Jo Rogers Hood, M.C.	CMS	1936
Capt. Felix R. Baylin, M.C.	CMS	1932
Capt. M. D. Bennin, M.C.	CMS	1941
Capt. Morris Fox, M.C.	CMS	1939
Capt. Benjamin Lipnik, M.C.	CMS	1940
Capt. Morris Rothenberg, M.C.	CMS	1937
Capt. Frank Warner, M.C.	CMS	1940

1938 — The *Quarterly* extends its sincere wishes for a speedy recovery to Captain Paul E. Armstrong who recently received the Silver Star for gallantry in action while serving as a medical officer with Merrill's Marauders during the Burma campaign. Captain Armstrong is now convalescing from typhus fever at Vaughan General Hospital, Chicago.

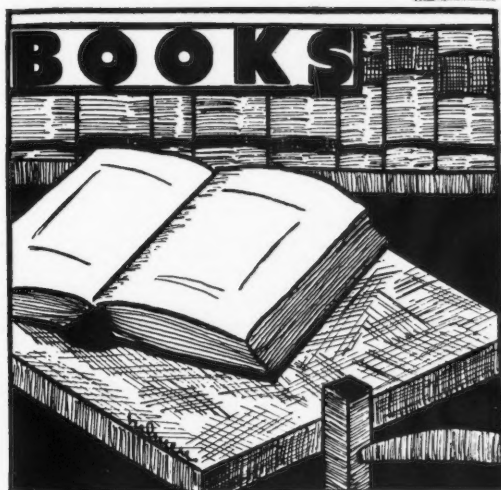
Lieut. Frank J. Sabatino, M.C. (CMS 1941) and Lieut. William Long, M.C. (CCMS 1942), being stationed together, send the regards jointly to the faculty, their former classmates and their friends. They would like to hear from their former classmates. Address them at 51st Evacuation Hospital, APO 9789, c/o Postmaster, New York City, New York.

How little do they see what is, who frame
Their hasty judgments upon that which seems.
—Robert Southey

All men are the same and all progress is purely exterior, mechanical and material. The great revolution—the one within—has not yet arrived. It was begun by Christianity but without result, because no Christian practices its teachings.

—Ibanez

Credit for the first description of the pulmonary circulation and the discovery that the blood is aerated in the lung should go to Ibn Nafis (Abi-al Hasan' Ala' al-Din 'Ali ibn Abi al-Hazm—I'm breathless!)



CLINICAL DIAGNOSIS BY LABORATORY EXAMINATION. By John A. Kolmer. Revised 1st edition. xlii and 1239 pages, 75 figures. D. Appleton-Century Company. New York, 1944.

While Kolmer was instrumental in the edition of a book containing the standard laboratory procedures in clinical pathology, this publication is not technical in its character. Only a small chapter is devoted to laboratory work proper. The bulk of the book may be considered a manual of pathologic physiology and the interpretation of laboratory findings. After the general discussion of the deviation from the 'normal', every chapter contains an excellent tabulation of the conditions in which such disorders occur. While one feels that more could be said about 'gastric' curves and interpretation of the findings of microbes and parasites in the stool, the help given by Kolmer in making hematologic changes and disturbances of the metabolism of organic and inorganic materials intelligible to medical students has to be appreciated. The book is well conceived, carefully elaborated and written in an excellent style. The referent hopes that it will become a generally used manual in courses of clinical pathology.

Dr. Oscar Felsenfeld

MANUAL OF VETERINARY BACTERIOLOGY. By R. A. Kelsner and H. W. Schoening. Fourth edition. xi and 719 pages, 94 figures. Williams and Wilkins Company, Baltimore, 1943.

Commonly one does not report on veterinary books in a medical journal. Due to recognition

of the fact that animal-borne diseases play a far greater role in humans than it was believed formerly, it is necessary to know about a manual where reliable information can be found on this subject. The greatest value of Kesler's and Schoening's book is that it informs not only on the very carefully scrutinized morphological and biochemical properties of bacteria and protozoa, but also on the occurrence and distribution of the microorganisms. The book adheres to Berger's classification, but corrects and completes the description of the organisms, based upon the authors' broad experience and on the newer literature. The references are advantageously quoted on the bottom of the respective pages. The illustrations are few but good; the technical methods are excellent. The book can be recommended as a reference manual for physicians without hesitation.

Dr. Oscar Felsenfeld

SYNOPSIS OF LABORATORY METHODS. By W. E. Bray. Third edition. Pocket format, 528 pages, 93 illustrations, 20 color plates. The C. V. Mosby Company, St. Louis, 1944.

A laboratory man—as this referent is—begins to realize how true the slogans on the progress of science are, when he meets a text-book with which he has been satisfied for the last years in a new edition, enriched with the novelties of the achievements of science. It would be difficult to find a laboratory worker who does not know Bray's book. And it would be even more difficult to find one who is not enthusiastic about the new chapters in this third edition. Much information we vainly sought in other texts is presented here, such as the typing of streptococci, tests for the pathogenicity of staphylococci, the frog test for pregnancy etc., an exhaustive treatment of Salmonella, Shigella, the factor, toxoplasmosis and, generally, the chapter on blood, add to the value of the book. Bray's Synopsis is a good addition to our libraries.

Dr. Oscar Felsenfeld

THE INFECTIOUS DISEASES OF DOMESTIC ANIMALS. By William Arthur Hagen. xxvii and 66 pages, 145 figures. Comstock Publishing Company, Inc., Ithaca, N. Y., 1943.

Modern investigations discovered many a human disease as a malady transferred from animal to man. The importance of such infections,

mainly in the field of intestinal and cutaneous disorders, is growing every day. It is necessary, therefore, to have a reliable and intelligible handbook to which we may resort when we should like to have information on such a disease. Hagen's present volume is such a publication. The bacteriological and parasitological parts of the descriptions of the illnesses are excellent. The referent, however, is not in a position to criticize the clinical interpretations. The epidemiological evaluations are more than up-to-date and the references are good. As a whole, the manual is easy to read. It is very informative. If a physician deals with a sickness which may be transferred from animal to man, he should not fail to consult this excellent book.

Dr. Oscar Felsenfeld

THE MICROBIOLOGY OF FOOD. By Fred Wilbur Tanner. vi and 1196 pages. Second edition. Garrard Press, 1944.

It is one of the great abilities of Tanner that he is able to accumulate a tremendous amount of material and then present the whole, often conflicting collection of data, methods and observations in such a way that every reader profits by it. As the other books by Tanner, this also is an excellent encyclopedic work, rich in references, descriptions and laboratory methods. Even if one would like to see certain names, e.g., "Salmonella aertrycke" changed to up-to-date designations, and more criticism regarding the bacteriological methods of investigation, the book excellently serves its purpose as an all-round manual of food microbiology.

Dr. Oscar Felsenfeld

* * * * *

How little do they see what is, who frame
their hasty judgments upon that which seems.

—Robert Southey

* * * * *

All men are the same and the progress is purely
exterior, mechanical and material. The great
revolution—the one within—has not yet arrived.
It was begun by Christianity but without result,
because no Christian practices its teachings.

—Ibaniz

* * * * *

**Once every 50 days the average adult American
consumes his own weight in food.**

School Notes

Since the arrival of Miss Marguerite E. Campbell the task of reorganizing the library has been successfully accomplished by her conscientious and thoughtful management. The library has come a long way since the beginning of its renovation in 1933. Last year the Library was open 278 days, and the combined attendance of students, faculty, and visitors numbered 27,748 persons. The period dating from 1934 to 1941 showed that the library's collection of journals, pamphlets, and books had grown to the neighborhood of 10,000 volumes. Today we have added to this growing collection, and the total number of catalogued books which are now available on the library shelves is 11,000. In addition, the library owns 2,000 books which are as yet uncatalogued, and hence not yet on the shelves. Last year alone, as a result of purchases, gifts, and continuations 502 books were added to this collection.

The exchange system instituted by Miss Campbell, has done admirable work in distributing books and journals from the duplicate collection to libraries all over the world. With the advent of war this exchange system has been confined to the United States and Canada; still, last year alone 440 journals and books were received in exchange from other American libraries. The library has also received 733 journals, pamphlets, and books last year in the form of gifts from individuals.

At present the library is receiving 206 current journals, and again, because of the war the number has been reduced. However, we are still receiving both a German journal and a French journal which are published by their alien custodians who are now present in the United States. Another helpful and extremely useful system that was established by Miss Campbell was the inter-library loan system, which has been worked out in conjunction with the libraries in the immediate vicinity of the school. This past year the library has cooperated in 28 library loans with the medical libraries of the University of Illinois, Loyola Medical School, and the library of the American Medical Association.

In addition to admirably continuing the work of the library, Miss Campbell has compiled four

bibliographies for members of the faculty last year. One of the most interesting bibliographies that Miss Campbell has prepared was concerned with appendicitis caused by rusty pins. In the course of her research on this problem, she found that 90 articles had been written of this subject. The original article was written in Latin, in 1600, and besides translating this article she also translated several others which were written in French and Scandinavian. Miss Campbell has also prepared an outline of the history of medicine which was mimeographed and distributed not only to American libraries, but also to three English libraries and two Canadian libraries. The outline was reviewed and commended by the Journal of the American Medical Association, and received favorable comment from the librarians to whom the outline was sent. Miss Campbell hopes some day to rewrite this outline in the form of a short book.

Miss Campbell is deeply endeared to the faculty and members of the student body for her ability and eagerness to help. This transition from a reading room to a modern library with all its modern conveniences is just an indication of things to come.

* * *

Dr. John J. Sheinin attended the meeting of the Association of American Medical Colleges in Detroit, Michigan, on October 23, 24, and 25.

Dr. Sheinin has been appointed to the advisory committee on the Allocation of Dogs of the Chicago Board of Health.

On October 28, 1944, Drs. Sheinin, MacFarland, Congdon and Essenberg attended the Regional Meeting of Anatomists in Madison, Wisconsin.

Our School presented an exhibit at the annual meeting of the Southern Medical Association, in St. Louis, Mo., between Nov. 12th and 16th. The exhibit was sponsored by the American Association of Tropical Medicine, which is a branch of the S.M.A. The title of the exhibit was "Cholera; Laboratory Diagnosis and Vaccination" and it was connected with a paper on this subject presented at the meeting by Dr. O. Felsenfeld and Miss V. M. Young. The exhibit was composed of photomicrographs of vibrios and histological lesions in cholera. The pictures were taken by Mr. Alvin Groupe; the enlargements made by Dr. Jay A. Smith; histological changes described by Dr. V. Levine. The second part of the exhibit was photographs of plates with colonies of V.

comma; posters demonstrating the geographical distribution of cholera; charts showing the efficacy of different cholera vaccines in men and animals; a poster on the durability of immunizing agents against cholera and reproductions of old engravings showing the first vaccination against cholera 60 years ago. The posters were made by Dr. Felsenfeld, Miss Young and Mr. E. Jacobson. The exhibit attracted the attention of many experts and students. We sincerely hope that the good reputation of The School will be further increased when more exhibits of this nature showing the research work performed in our School are presented.

Social Notes

Marriages

Dr. Sally Jane Major (class of September 23, 1944) to Dr. Thomas Carroll Tyrrell on September 25, 1944 at the St. Joseph's Church—Mishawaka, Indiana.

Dr. Sol Nichtern (class of 1943) to Claire Joseph of New York City on June 4, 1944.

Lt. Arnold N. Berger (class of 1943) to Sylvia Zackin of New York on December 9, 1944.

Births

A girl, Susan, to Dr. and Mrs. Ralph C. Rudder (class of 1943) on September 26, 1944.

A girl, Jane Carol, to Captain and Mrs. Lee Tann (class of 1941) on September 30, 1944.

Heartiest congratulations!

* * * * *

In old Egypt the surgeon induced anesthesia by striking the patient over the head. — (Well-trained anesthetists were plentiful, no doubt.)

* * * * *

The Soviet Union has recently reported certain healing properties of onions. But Ambroise Pare used the onion treatment for burns as early as 1513.

* * * * *

Giants of the Bible: Goliath of Gath—11' tall Og, King of Basch had a bedstead 16½' long.

* * * * *

In 1696 there was an old woman in France who constantly shed long horns from her forehead, one of which was presented to the King. (Trying to horn in—huh?)

Abstracts

SOME HARMFUL EFFECTS OF RECUMBENCY IN THE TREATMENT OF HEART DISEASE, by S. A. Levine, J.A.M.A., Vol. 126, No. 2.

At present all students and physicians have been forcefully impressed with the great importance of rest in bed, although in practice one finds great variations in the degree to which the principle is applied. Bed rest will decrease the cardiac output, but elevation of the lower extremities will encourage venous return putting a greater burden on the right and eventually the left heart. It has frequently been seen that many patients put to bed soon develop "cardiac asthma." The edema fluid leaves the tissue spaces and there is a shift of fluid from the extremities to mainly the right pleural space.

With prolonged bed rest, thrombi develop in the veins of the legs and pelvis due to stasis and increased intrabdominal pressure. In some cases, these thrombi give rise to fatal pulmonary emboli. The precautions necessary to prevent venous thrombi and the resulting pulmonary emboli consist in massage of the legs and putting the bed in a low Fowler's position.

DEMEROL: A NEW SYNTHETIC ANALGETIC, SPASMOLYTIC AND SEDATIVE AGENT II—CLINICAL OBSERVATIONS, Frederick F. Yonkman, Paul H. Noth, and Hans H. Hecht, *Annals of Internal Medicine*, Vol. 21 No. 1, July 1944. pp. 17-33.

In studies carried out by the authors on a series of 146 patients, the following results were obtained:

1. 64.2 per cent complete relief of severe pain was achieved . . . 23.6 per cent partial relief, and no relief in 12.2 per cent, following administration of 100 mg dose.
2. Results were more complete on intramuscular injection and occurred from five to twenty minutes. Results were obtained orally from twenty to thirty minutes.
3. The analgesic potency was greater than that of one grain or more of codeine, or combinations of codeine and aspirin. It was usually less than that of morphine in one-quarter or one-sixth grains.
4. Its sedative action is somewhat less effective than its analgesic action.

DEMEROL benefited patients with status asthmaticus, had side effects in 27.4 per cent of the patients (4.8 per cent had treatment stopped because of these), showed no changes detectable by laboratory methods, and when followed by opiates showed undesirable symptoms in none out of 21 patients.

Summarily, the drug is an effective, relatively non-toxic drug with addictive properties, not as marked as some of the opiates, morphine and its derivatives; and which is capable of replacing these drugs in a large number of painful conditions.

E. C.

DEMEROL: A NEW SYNTHETIC ANALGETIC, SPASMOLYTIC AND SEDATIVE AGENT I—PHARMACOLOGICAL STUDIES, Frederick F. Yonkman, Paul H. Noth, and Hans H. Hecht, *Annals of Internal Medicine*, Vol. 21 No. 1, July 1944. pp. 7-16.

Eisleb and Schaumann synthesized Demerol (ethyl ester of 1-methyl-4 phenyl-piperidine-4-carboxylic acid) in 1939. Demerol, known in previous literature as Dolantin, Dolantol, D-140, and S-140 resembles both morphine and antipine, chemically. It is a safe drug, and has been administered during assay tests in relatively high doses with impunity.

It is readily absorbed after oral, subcutaneous or intramuscular administration, producing analgesia and sedation. It exerts a weak atropine-like effect upon any viscus containing smooth muscle. These effects are most marked during spasm. The analgesic effect of Demerol is marked.

Unlike morphine, Demerol does not have a constipating effect, and therefore may be used where a constipating effect is not desirable. Because of this, it may be used as a bowel splint.

* * * * *

In Peru in 1794 a Sambi woman was killed by lightning, and the next day the abdomen was opened by official command and a living child was extracted.

Countess Margaret, daughter of Florent IV, Earl of Holland, brought forth at one birth 365 children—182 males, 182 females, 1 hermaphrodite, on Good Friday, 1278. They were still on exhibition in London during the last century and were considered one of the curiosities of Holland.

Organizations

THE STUDENT COUNCIL

The last quarter of the school year has been a period of progress and achievement for the Student Council. Upon the graduation of President Arthur Zweibel in September, Leonard Arnold was elected President. The four graduating members of the Council were replaced by the class officers of the incoming Freshman: M. Katz, D. Osman, Caroline Winograd, and L. Goldman.

The various Committees of the Council have accomplished the following:

1. The Endowment Committee has organized an endowment drive program which promises to culminate in a fund which will insure the goal of high standards and security set for our School.

2. The Student Health Committee has established an emergency committee composed of members from each class who are responsible for procuring medical care for students when the need arises during school hours.

3. The Constitutional Committee has recommended four amendments to the Constitution, all of which have been ratified by the Council and student body.

4. The Student Council Lecture Committee organized a series of evening lectures which were held every two weeks during the quarter. Lectures by six prominent men of medicine and science in Chicago were upon the program.

5. The Student Relations Committee presented a "Student's Creed" which the Council approved and adopted; and is preparing a Code of Ethics governing student conduct.

In submitting this report the Council members wish to express their appreciation to the many committeemen whose cooperation has made this work possible, and to the entire student body for its loyal support in the activities of the Council.

AIMS

During the past semester this organization has been rather dormant and inactive. That is largely the result of the increased activity of the school's Student Council and its allied committees. However the organization is striving for a resurgence of activity next semester, to be

highlighted by a vigorous 100% membership drive, a series of noon-day films, and a continuance of their past athletic achievements. Concerning the latter the AIMS purchased a football for student use during their free hours and it has seen good service; it also secured the use of the "Y" gym on two nights a week for those who play basketball and handball.

PHI LAMBDA KAPPA

The Alpha Rho chapter of the Phi Lambda Kappa fraternity enjoyed another season of active and interesting events this past semester. The following committees were organized and were active in the past three months:

The Pledge Committee headed by Chancellor Charles Biren selected a group of promising pledges from the applicants of the lower classes, and conducted a series of interviews and meetings and talks with those men. In their honor, the Social Committee, run by Stanley Menachoff, conducted a dance at the Morrison Hotel on Saturday, December 3. A very pleasant dinner meeting was held at the Triangle Restaurant at which our own Dr. Plzak gave an interesting talk on Czechoslovakian medicine.

A new committee, the Endowment Committee, was formed and put under the leadership of Louis Polskin and Stanley Beckerman. This committee is striving to work in harmony with the similar student council committee, and is making every effort to see to it that the obligation of the fraters is met.

Another new addition is the Fraternal Committee whose chairman is Paul Prager. By this method, the task of helping the members when they are behind in studies, and when they are sick and in need, has been centralized and much improved. They are also attempting to institute a code of ethics and conduct for the fraternity, as well as an increased comradeship among the members.

The Constitutional Committee has prepared a series of widespread changes and revisions to the present constitution, and in short order they will be presented to the whole chapter for discussion and vote.

* * * * *

Recent case: Miss "Millie Josephine" of Chicago, at age 13, was 5'6" tall and weighed 422 pounds.

Letters to the Editor

To the Editor of the *Quarterly*:

The Student Relations Committee of the Student Council was created July 1st, 1944, with Robert Bodwin as Chairman. Its functions were defined as follows: "... to investigate and discuss all matters pertaining to academic and social affairs of the student body and student-faculty relationship." After a series of meetings the Committee made the following recommendations to the Council:

1. That a "Student's Creed" embodying the ideals and aims of the student body be formulated; and
2. That a Code of Ethics be formulated, consisting of a body of rules of academic and ethical conduct.

The Council approved the recommendations of the Committee; and instructed it to begin work upon the two projects. Before the work was completed, Mr. Bodwin graduated (September, 1944) and I was appointed Chairman of the Committee.

The present membership of the Committee is as follows:

J. Goldflies	L. Finkel
S. Menachof	H. Berk
C. Biren	M. Morrell
J. Nelson	R. Hiatt
L. Klein	E. Svetkey
R. Carlson	D. Platt

Upon November 27 the Committee submitted the following "Student's Creed" to the Council, with the recommendation that it be printed in a form suitable for framing and be made available to every student. The Council unanimously approved and adopted the Creed.

A MEDICAL STUDENT'S CREED

In the belief that the cure of disease and the relief of human suffering is the noblest endeavor of man, I dedicate my life to the study of medicine and to the practice of its art.

I shall pursue the study of medical knowledge without ceasing—knowing that medicine is a living art, constantly changing and improving.

I shall treat the diseases of the body and mind with all my skill, without regard for personal fortune or reward.

I shall endeavor to the best of my ability to add to the store of medical knowledge, and to better the methods of the profession.

I shall by example and instruction impart my knowledge to all those worthy and desirous to receive it, endeavoring to make my life an inspiration to those who follow after me in the profession of medicine.

The Committee is now engaged in the construction of a Code of Ethics, which will be presented to the Council shortly. The interest and cooperation of the committeemen has been excellent; and I feel that real progress has been made toward fulfilling the aims of the Committee.

Don Shoemaker, Chairman

Dear Editor,

It wasn't very long ago that we started our work on the first *Quarterly*. The copies you have since put out make me blush a little. They certainly are a far cry from the products of our first feeble efforts, and I'm left with a feeling of satisfaction that we had at least started a good thing. Jerry Tobin, Arthur Horowitz, Harry Barasch, Dan Halpern, and the rest of the original cast, I'm sure, feel the same way.

I meant to write sooner, but I never seemed to find the time. Every time I received a copy of the *Quarterly*. I felt inspired. I hope you'll find an extra copy somewhere to mail to me here in England. I'd sure look forward to receiving it. I wish, too, that if you have the addresses of any of our graduates here in the British Isles or on the European continent, that you would mail them to me. Naturally, I am most interested in members of the classes of '41, '42, and '43.

Please give my regards to Doctor Sheinin, Miss Luebeck, the Phi Lambs and to Doctor J. Brodsky.

Sincerely,

Lt. Edward H. Einhorn, M.C.
65th Signal Battalion
A.P.O. 229 c/o P.M. New York, N.Y.
* * * * *

The best way to come to truth being to examine things as really they are, and not to conclude they are, as we fancy of ourselves, or have been taught by others to imagine.

—Locke

New Books in the Library

- Adler, A. *Neurses*. 1930.
- A. M. A. *New and non-official remedies*. 1944.
- A. P. A. *Language and thought in schizophrenia*, ed. by J. S. Kasinen. 1944.
- Annual Review of Physiology*. Vol. 6. 1944.
- Best & Taylor. *Living body*. Rev. ed. c1944.
- Clavero del Campo, P. *Tifus exantematico*. 1943.
- Dreikurs, R. *Individual psychology*. 1936. 3d copy.
- Hackh-Grant. *Chemical dictionary*. 3d ed. c1944.
- Hammond & Co. *World atlas*. 1943.
- Ireland, N. O. *Index to indexes*. 1942.
- Jackson, D. E. *Experimental pharmacology and materia medica*. 2d ed. 1929.
- Janse, O. R. T. *Peoples of Fench Indo-China*. 1944. #19.
- Kronfeld, P. C. *Human eye in anatomical transparencies*. 1943.
- Lorand, S., ed. *Psychoanalysis today*. c1944. 2 copies.
- Rockefeller Inst. Med. Research. *Studies*. Vol. 125. 1944.
- Sigler, L. H. *The electrocardiogram*. c1944.
- Thompson, C. J. S. *History and evolution of surgical instruments*. 1942.
- U. S. War Dept. *Hydraulic tables*. 2d ed. 1944.
- War Wounds and Injuries*. 2d ed., ed by R. Maingot. 1942.
- Waugh, T. R. *White blood cell differential tables*. c1943.
- Wenley & Pope. *China*. 1944. #20.
- Windle, W. F. *Physiology of the fetus*. 1940.
- Becker, S. W. *Commoner diseases of skin*. 1935.
- Bremer, J. L. *Histology*, rewritten by R. J. Weatherford. v1944.
- Cowdry, V. *Microscopic technic in biology and medicine*. 1943.
- Cushing, H. *Medical career and other papers*. 1940.
- Dack, G. M. *Food poisoning*. c1943.
- Heilbron, I. M., ed. *Dictionary of organic compounds*. Vol. 1, new ed. Vol. 2. 1938-43.
- Kreider, P. G. *Measles pneumonia and encephalomyelitic*. 1943.
- Landon & Smith. *Polio-myelitis*. 1934.
- Mayo Clinic. *Proceedings*, vol. 35. 1943. 1944.
- Bastedo, W. A. *Materia medica*. 3d ed. 1933. 2d copy.
- Rawlings, I. D. *Rise and fall of disease in Illinois*. 1927. Vol. 2.
- Rich, A. R. *Pathogenesis of tuberculosis*. 1944.
- Stedman, T. L. *Medical dictionary*. 15th ed. 1942.
- White, P. D. *Heart disease*. 3d ed. 1944.
- Advances in Protein Chemistry*. Vol. 1. 1944.
- Allen, E., ed. *Sex and internal secretions*. 1939.
- American Academy of Ophthalmology. Trans., Scientific papers*, 45-46. 1940-1942.
- American College of Surgeons. Yearbook*, 30. 1942-43.
- American Red Cross. First aid textbook*, rev. c1940.
- Bockus, H. LeR. *Gastro-enterology*. 1943. Vols. 1, 2 (3 vols. in all).
- Cobb, S. *Borderlands of psychiatry*. 1944.
- Glass, B. *Genes and the man*. 1943.
- Grabill & White. *Electrocardiography in practice*. 1942.
- Harvey, Wm. *Anatomical studies on the action of the heart and blood*, tr. by C. D. Leake. 3d ed. 1941.
- Hull, T. G. *Diseases transmitted from animals to man*. 2d ed. 1941.
- Knaysi, G. A. *Bacterial cytology*. 1944.
- Sheldon, W. H. *Varieties of human physique*. 1940.
- Stuhlman, O., Jr. *Introduction to biophysics*. c1943.
- U. S. Census. *Vital statistics. Pts. 1-2*, 1942. 1944.
- U. S. Government Manual. Rev. through Aug. 1, 1944. 1944.
- Vitamins and Hormones*, vol. 2, 1944. 1944.
- Whitney, D. DD. *Family treasures*. c1942.
- Who's Who, 1944. (International)* 1944.
- Wilson, S. A. K. *Neurology*. 2 vols. 1940.
- Haagensen & Lloyd. *A hundred years of medicine*. c1943.
- Hinsie & Shatzky. *psychiatric dictionary of modern terms*. 2nd printing. 1944.
- Mills, C. A. *Medical climatology*. c1939.
- Mustard, H. S. *Introduction to public health*. 2nd ed. 1944.
- Myerson, M. C. *Tuberculosis of the ear, nose and throat*. 1944.
- Orias & Braun-Menendez. *The heart-sounds in normal and pathological conditions*. 1939.
- Osgood, E. E. *Textbook of labor-story diagnosis*. 3rd ed. 1944.
- Saphir, O. *Outline of tropical medicine*. 1944.
- Squibb & Co. *Lymphogranuloma verereum*. c1943.

Foreign Bodies—

(Continued from page 13)

Obliteration of the piriform sinus, unilateral. As seen by laryngoscopy direct or indirect, should always be suspected as a swelling due to a foreign body.

Chest findings. On physical examination in a typical uncomplicated case, findings are essentially negative.

Fever. May be present due to dehydration, depending on deprivation of fluids and loss of fluids (salivary secretions). Infectious complications are also responsible for increased temperature.

Diagnosis.

Diagnosis is made on:

History

Symptoms

Laryngoscopy—direct or indirect

Roentgenological studies, with or without barium. Films should be taken of the cervical, thoracic and abdominal regions, both antero-posterior and lateral views. Foreign bodies lying in the lateral body plane might be invisible in the shadow of the spine, heart, or great vessels; but would be revealed in the lateral view because of the greater edgewise density of the intruder and the absence of other confusing shadows. Quite often multiple foreign bodies are present, yet history is suggestive of a single item.

Foreign bodies casting a very faint shadow on a plate may be totally invisible on the fluoroscopic screen, hence fluoroscopy should never supplant the x-ray. In order to facilitate esophagoscopy for extraction, a very small piece of teased cotton impregnated with barium is used where barium studies are required to demonstrate a foreign body, such as non-radio-opaque substances.

Flat or disc-shaped objects located in the cervical region, lying in the lateral body plane will be found to be in the esophagus, for it assumes that position by passing down flatwise behind the larynx. If, however, the object is seen to be in the sagittal plane, it must lie in the trachea. The position was necessary for it to pass through the glottis chink, and can be maintained because of the yielding of the posterior membranous wall of the trachea.

Treatment

Pre-extractive case:

Bed rest

Sedation—Morphine with atropine as a hypodermic preferred

Parenteral fluids

Intravenous sulfonamides

Operative Case: Varies with the individual case and should be left to the discretion of the endoscopist.

Post-extractive Case: Essentially the same as the pre-extractive case, with the addition of careful observation for impending complications. The value of a roentgenogram after the removal of a foreign body cannot be too strongly emphasized. It is evidence of removal and will exclude the presence of a second intruder which might have been overlooked in the first study. It is to be emphasized that blind bouginage has no place in the diagnosis of any esophageal condition.

Advising patients to swallow such substances as pieces of hard bread in an attempt to dislodge a foreign body is frowned upon. By so doing, the incidence of perforation may occur. This is particularly true in cases of sharp-edged foreign bodies.

Complications

Perforation—either by esophagoscope or by the foreign body, resulting in traumatic esophagitis

Septic mediastinitis

Cervical cellulitis

Gangrenous esophagitis

Stricture due to prolonged sojourn of the foreign body

Emphysema, unaccompanied by a pyo-process

* * * * *

Psychomatics—

(Continued from page 15)

against routine activities, a disturbance of the regulatory homeostatic mechanisms of the blood sugar concentration is likely to develop and cause the chronic asthenic syndrome and occasionally acute attacks of weakness and fatigue.

"One aspect of this condition is that under the influence of vagal excitation, or at least of vagal preponderance, a condition of hyperinsulinism develops and leads to a disturbance of the regulatory mechanism which controls the sugar concentration of the blood."

Mufson (1944) reported upon a series of in-

vestigations upon Raynaud's disease. He believes that in patients suffering from Raynaud's disease a continuous flow of vasoconstrictor stimuli is maintained by a chronic psychosomatic disturbance. These stimuli induce an angiospasm which becomes complete when the skin is exposed to cold. His work shows that the primary and finally complete obliteration of the lumen of minute blood vessels is the result of a compounding of two forces, one emotional and the other physical. Secondly, thrombi appear in these injured vessels and the local lesion develops.

The somatic disturbance in Raynaud's disease is found in the minute vessel system of the skin. Variations in the diameter of these vessels are regulated under the influence of either or both the short axon reflexes or the distant sympathetic pathways. In Raynaud's disease there is an exaggeration of the vasoconstrictor responses of the vessels to cold and fear. The constriction is prolonged and so intense that the anoxia resulting causes permanent injury to the walls of the vessels and the nearby tissues. Repeated vasospasm thus brings chronic injury to the endothelium, a non-specific endarteritis may develop, and thrombi may form. The skin and nearby tissues are now insufficiently nourished, and break down easily when traumatized.

In the cases studied by Mufson, fear played an important part in the production of vasoconstriction. He has found that the constrictor response created by fear is a more highly developed reflex than its opposite dilator reflex—and that anxiety in his patients played an important part in the production of the disease syndrome.⁸

We cannot suppose that the studies mentioned here present more than a starting point in the field of psychosomatic research. In the study of the psychogenesis of disease the internist and the psychiatrist must help each other—and both must have the help of careful experimental workers to give meaning to their clinical observations.

* * * *

(The author gratefully acknowledges the helpful criticism of Dr. Rudolph Dreikurs and Harold Koenig in the preparation of this paper.)

1. Cobb, Stanley: *Borderlands of Psychiatry*. 1943, Harvard University Press, Cambridge.
2. Adler, Dr. Alfred: *Physical Manifestations of Psychic Disturbances*. *Individual Psychology Bulletin*, IV:3-8, 1944.
3. Alvarez, Walter C.: *Nervousness, Indigestion and Pain*. Harper and Bros., New York. 1943.

4. Masserman, J. H.: *The Hypothalamus in Psychiatry*. *Am. J. Psychiatry*, 98:633-637. 1942.
5. Wolf, S. and Wolff, H. G.: *Evidence for the Genesis of Peptic Ulcer in Man*. *J. A. M. A.*, 120:670. (October 30, 1942.)
6. Curtis, Wm. Boyd: *Psychosomatic Relationships*. *Kentucky Medical Journal*, 38:313. (July 1940.)
7. Alexander, Franz and Portis, Sidney A.: *Psychosomatic Study of Hypoglycaemic Fatigue*. (Read before a meeting of the Council of Brief Psychotherapy, Chicago, January 1944.) *Psychosomatic Medicine VI*, No. 3 (July 1944.)
8. Mufson, Isidor: *The Mechanism and Treatment of Raynaud's Disease: A Psychosomatic Disturbance*. *Annals of Internal Medicine*, 20:228. (February 1944.)

* * * *

Personal Memories—

(Continued from page 8)

various staff members to whom certain journals were assigned. After each review, comments could be made and then a final comment and criticism was made by the chief who either praised or admonished the translator for errors or misrepresentations of the article reviewed. Problems arising in diagnosis and treatment, changes in surgical technique, reports on the progress in research projects with which each staff member was busy, and a study of the morbidity and mortality encountered, were some of the other matters that were regularly considered.

Twice a year the entire clinic staff would visit for two or three days at the sister medical schools at Brno and Bratislava where the two other Czechoslovakian universities were located. Scientific programs, operative and dry clinics were given just like in our country at the various conventions. Throughout the year we had frequent visits by distinguished surgeons of other European countries, and I was happy to meet, during my stay, several of our own prominent medical men who were making a tour of the European countries, and I was happy to meet, as well as his great repute, attracted many to his clinic. During the vacation period when the work was relatively light, the staff members would visit the various clinics of Europe. This created new friendships and was their way of breaking down the nationalism in medicine, and also as the chief often put it—it helped to foster better political relations and understanding between the various peoples of Europe.

And finally, in closing, I would like to relate a yearly custom that revealed the human side

of this clinic. On Christmas Eve a brief clinical staff meeting was held after which a general visit was made through all the wards of the hospital. These wards were decorated with holly and bells; and in each room stood a Christmas tree, trimmed and lighted with candles. As this human train of doctors passed through each ward, the professor stepped to each bedside and shook the hand of each patient in greeting and placed a small box of bonbons in the hand of each female patient. Some of these hands were those of the dying but the hand shake and the bonbons were placed there just the same.

Thus I have tried to give you some understanding of the way of life and of work at this surgical clinic of a small democratic nation ten years ago. It kept abreast of the times, taught its students the best, and rendered service of the highest order and yet managed to preserve for itself the human side of life which always means so much to the surgically-ill patient. I only hope that what now has come to this unfortunate land of the Czechs will pass, and that in the not too distant future, it again shall enjoy a new rebirth of academic freedom.

* * * * *

Annihilation—

(Continued from page 5)

cooled under the heels of advancing German tanks.

In the months that followed, all non-German colleges were closed. Within two years the Middle Schools (a combination of our high schools and junior colleges) were taken over. The country of the Czechs was left with only grammar schools and grade schools. The teachers were disbursed, and the university equipment shipped to Germany. Part of the libraries was burned. The rest was sent to the Reich.

By these measures, the German hoped to reduce the Czechs to a nation of "shepherds and day laborers". Still, the spirit and fortitude of that nation proved too much for them. President Roosevelt in observing International Students' day on November 17, 1944, described the courage of the Czechs and the motives of their conquerors in a single simple statement when he called the massacre of Czech students and teachers "a despicable mass murder that subsequent events have proved was but a part of the Nazi design to quiet forever the voices of men

who considered death preferable to destruction of their freedom of belief and their right to teach that belief . . .".

The nation of Huss, Comenius, Massaryk, Smetana, Dvorak and Ressler cannot be kept in illiteracy. At this very moment, both in America and in Britain, committees are at work attempting to rebuild the devastated Czechoslovak universities, while a representative of the Czechoslovakian government in exile is even now entering the Eastern part of his homeland, along with the victorious Russian armies, in an attempt to reestablish there, the foundations of higher learning.

In commemorating this 5th anniversary of the closing of Czech schools and the callous slaughter by the Nazis of their students and faculty, we pay tribute to these brave men and women who died so that democratic education, progress and culture might survive. In tendering them our respects, we also owe them a debt of gratitude. In this great country of ours, where freedom of speech, education, and intellectual expression are too often taken for granted, their blood and suffering have made us stop, and think—and give thanks. It is good for men, whether they be laborers, lawyers, merchants or physicians, to stop, and think — and give thanks.

* * * * *

Lectures—

(Continued from page 19)

foci in the mouth and teeth. The pre-operative tests may take from two to three weeks. In some cases as many as twenty-five blood transfusions have been given to build up a patient. All this has made the surgical procedure safe, and has lowered the mortality rate. The blood bank has done much to cut down the incidence of deaths after the removal of the neoplasm. In 110 cases of cancer of the bowel at the Cook County Hospital, there have been only 4 deaths.

Sulfa compounds are given to prepare the patient for the operation by lowering the bacterial count of the stool.

The condition of the patient is studied for the choice of the anesthetic to be administered and professional anesthetists are used. The anesthetic generally employed is a spinal. If the patient is nervous, pentothal sodium is given.

When the patient is fully relaxed, the operation

begins. Sulfa drugs are used in the peritoneal cavity and in anastomoses. The line of anastomosis should not leak and should heal quickly. Therefore much care must be taken for the proper site of the line of suture.

Closure of the abdomen is another important factor in the operation and since wire has been used for closure, the mortality has dropped from 10% to 2%.

After surgery, the patient is given CO₂ to stimulate respiration. Passive movement is quickly begun and the patient is out of bed on the second or third day in order to prevent the formation of emboli. The stomach is kept empty until gas passes rectally. Blood transfusions or plasma are given as needed. These measures have done much to greatly decrease post-operative complications.

In closing, Dr. Meyer presented the thought that a competent physician and surgeon should have a profound knowledge of therapy, for this will mean much towards the cure of the patient.

* * * * *

Enteric Center—

(Continued from page 20)

change have been filled; 130 amebic slides; 137 bacterial and 8 mold cultures have been received for diagnosis. These have come from Army Station Hospitals throughout the world, the State Veterinary Research Institute of Venezuela, from Mexico, Panama, and other South American countries, as well as from India; from bacteriologists, hospitals and physicians. At the present time experimental tests are being performed to improve the methods of culturing intestinal micro-organisms. These are being carried out in cooperation with the Calcutta Institute of Tropical Medicine. Several papers have been published and others are in process of publication as a result of this enteric research. These endeavors are of paramount importance since many tropical diseases hitherto unknown or extremely rare are appearing in the United States with ever increasing incidence among our returning veterans from overseas services.

Laboratory instructions for the preparation of slides or cultures for shipping are furnished and diagnoses are made without charge by the center at The Chicago Medical School.

Medicine In Siam—

(Continued from page 20)

Rockefeller Foundation established a modern medical school at Bangkok. It is surprising what Siamese boys can do when given ten years of education preparatory to their medical course in consideration of the fact that many have come from a primitive environment almost completely lacking in scientific knowledge or devices. Through the generosity of the Rockefeller Foundation we could provide equipment for anatomical teaching in some respects superior to any I have seen in this country.

The startling contrast between the most modern and the most backward that is so characteristic of the Orient in many fields is demonstrated clearly in the life of the Siamese medical graduate. I know only one who did not take a position in the State Public Health Service. Except for the patients of missionary doctors and aside from a few Siamese of wealth who can afford foreign doctors, western medicine in Siam is almost entirely administered by the State.

* * * * *

Alumni of the University of Charles, now members of the staff of The Chicago Medical School.

Dr. Hessel, Ernest—Instructor in Orthopedics—former Assistant of Surgery of the University of Charles, First Assistant Surgeon of the General Hospital of Vinohrady at Prague. Graduated from the Faculty of Medicine of the University of Charles.

Dr. Felsenfeld, Oscar—Associate Professor of Parasitology and Tropical Medicine, former instructor of Laboratory Methods of the University of Charles, Special Assistant of the Institute of Technology of Prague. Graduated from the Faculties of Science and Medicine of the University of Charles.

Dr. Plzak, Louis—Assistant Professor of Surgery and Surgical Anatomy. F.A.C.S. Formerly Clinical Assistant at the First Czech Surgical Clinic of the University of Charles. Graduated from the Rush Medical College, Chicago, Illinois.

* * * * *

While the tyrant conquers the earth, he who is eventually to dethrone him must first conquer himself. There can be no new qualities in our civilization till there are new qualities in our minds and hearts.

—James Hilton

Faculty Notes

PUBLICATIONS

- Borovsky, M. P. & Julian Arendt
Chondrodystrophia calcificans congenita. *J. pediatrics*, 24, 559-567, 1944. (May, no. 5.)
- Felsenfeld, O. & V. W. Young
Occurrence of members of the genus *Salmonella* in inhabitants of state hospitals of the greater Chicago area. *J. lab. & clin. med.*, 29, 375-382, 1944. (April, no. 4.)
- The significance of single and multiple *Shigella* infections in institutionalized children. *J. pediatrics*, 25, 56-57, 1944. (July, no. 4.)
- Yeast-like fungi in the intestinal tract of chronically institutionalized patients. *Am. j. med. sci.*, 207, 60-63, 1944. (January, no. 1.)
- Oppenheim, M. & Smith, H. A.
Treatment of scabies in war time. *Arch. derm. & syphil.*, 48, 370-372, 1943. (October, no. 4.)
- Reich, R. J. & N. J. Nechtow
Selpingo-cophoritis and appendicitis in patient with congenitally absent vagina, uterus, and left adnexa. *Am. j. surg.*, 64, 291-293, 1944.
- Wosika, P. H.
An evaluation of the dark test. *Ann. int. med.*, 21, 1-118, 1944. (July, no. 1.)
- Night blindness of war. *War medicine*, 4, 331-334, 1943. (September, no. 3.) (This has a long bibliography.)
- Roberts, R. G.
Address: "Hemin and Homochromogens," *Journal Club of Physio. Dept., University of Illinois Med. School*. November 15, 1944.
Issuance of Canadian patent on Insulin Perri-hemochromogen.

* * * * *

Next semester will undoubtedly see the resumption of the basketball tournament at the "Y," and our school, under the sponsorship of the Student Council, is planning to enter a team. Just before the last semester ended, a scrimmage game was held between the Chicago Medical School and Illinois Medical School. Illinois won 26-16. All you would-be basketball stars come out and play next semester; perhaps we can field a team that will win the trophy just as it did the last time an interschool tournament was held.

* * * * *

Harry Jenkins, born in Yorkshire in 1501, died in 1670, aged 169 years. When above 100 he was able to swim a rapid stream.

Chief Justice John Marshall of the U. S. Supreme Court had removed, by lateral lithotomy, more than 1,00 vesical calculi.

PHARMACOPOEIA PROPOSAL

A change in the nomenclature of the U.S.P. has been advocated by the U.S.P. Revision Committee. It has proposed to give English titles precedence over the Latin, and to classify drugs according to therapeutic use and activity rather than alphabetically as in the past. The first section of the Pharmacopoeia is to be restricted to those drugs used most extensively.

Comments concerning the proposal are invited. They may be addressed to:

E. Fullerton Cook
Gen'l Chairman, U.S.P.
43rd St. and Woodland Ave.
Philadelphia 4, Pa.

* * * * *

We seem almost forced to accept the dreadful hypothesis that in the very structure and substance of all human constructive social efforts there is embodied a principle of death . . . that the intellect can provide no permanent defense against a vigorous barbarism . . . that the fineness of moral fibre must in the long run succumb to the primitive and coarse.

—Wilfred Trotter

What does it all mean? What does the word 'life' mean to us? A feast? No. Work? No. A battle Oh, no! Life is something merely tiresome, dull, a kind of heavy burden. In carrying it, we sigh with weariness and complain of its weight. Do we really love life? The love of life! The very word sounds strange in our ears! We love only dreams of the future, and this love is Platonic, with no hope of fruition.

—Maxim Gorki

We are in a troublesome world, a strange common unrest, a strange disposition to forget that great injunction to prove all things. There is a strange restlessness, a strange desire to break away from that which is proved—to rule or ruin.

—Justice McReynolds

I had rather believe all the fables in the Legend, and the Talmud, and the Alcoran, than that this universal frame is without a mind.

—Francis Bacon

Truth is the first casualty in wartime.

—Lord Ponsonby

The divine beauty superior to all the dreams of the Earth: I have seen it; only a little courage is needed to reach it and stay there.

—Francois Rene de Chateaubriand

ONE FOR THE QUIZ KIDS

If in a four-handed deal with a deck of 52 cards there are 645,013,559,600 possible different hands of 13 cards each, in humans with 48 chromosomes and at least 4,000 genes, how many different kinds of individuals would be possible if the genes were dealt at random like cards?—(Now let me see—?).

* * * *

Great fleas have little fleas

Upon their backs to bite 'em,

And little fleas have lesser fleas,

And so ad infinitum.

And the great fleas themselves

In turn have greater fleas to grow on,

While these again have greater still,

And greater still and so on.

De Morgan

Record tells of a boy who was literally and without evasion with child, for the fetus was contained in a sac communicating with the abdomen and was connected to the side of the cyst by a short umbilical cord; nor did the fetus make its appearance until the boy was eight or nine years old.

* * * *

They do certainly give very strange and new-fangled names to diseases.—Plato.

* * * *

"The first attempt at the classification of the bacteria and protozoa which Linnaeus had grouped under the vague genus 'chaos,' was made by Otto F. Muller . . . 'Bacillus' and 'Spirillum' date back to Muller, though they do not entirely retain their original significance."



"Have your hormones been checked lately, Miss Libido?"

**HEMATOLOGY IS WONDERFUL SUBJECT,
I LOVE IT**

Is that target cell a target cell
And what's at two o'clock,
And what's that little thingamajig
A'sitting up on top?
Oh! My mother was a lady,
And little did she know
That when I had become a man
To med school I would go.

Oh! A pathologic red cell
Is a lovely thing to see;
It is unique in that it has
Its own pathology.
You can film it, you can stain it,
You can see what you can see;
But you'll never find the trouble for it's
Its own pathology.

Chorus: And it's not going to show it to you;
No, it's not going to show it to you.
You can focus your slide,
But its faults it will hide;
No, it's not going to show it to you.

A basophil is just a pill,
A platelet I can spy;
You're always right 'bout a myelocyte
'Cause it hits you in the eye.
But a pathologic red cell
Is a thing I cannot find,
And the horror of this constant thought
Unbalances my mind.

Chorus: And you'll see them when you go to bed,
Yes, you'll see them when you go to bed.
You may shut your eyes tight,
But all through the night
The red cells will dance in your head.

* * * * *

He who is allowed to take the start of his species, and to penetrate the veil which conceals from common minds the mysteries of Nature, must not expect that the world will be patiently dragged at the chariot wheels of his philosophy. Mind has its inertia as well as matter; and its progress to truth can only be insured by the gradual and patient removal of the difficulties which embarrass it.

—Sir David Brewster

HELP YOURSELF
with the latest medical books

HELP YOUR SCHOOL
to a better library.

Purchases of medical texts and other volumes thru the school library, gives to the library the benefit of your purchase.

★

**LATEST EDITIONS
NEW BOOKS**

★

Speakman's
Chicago Medical Book Co.
1820 WEST CONGRESS ST.
CHICAGO

FAIRVIEW SANITARIUM

2828 S. PRAIRIE AVE., CHICAGO
PHONE CAL. 4588

FOR CARE AND TREATMENT OF
MENTAL AND NERVOUS DISORDERS
• ELECTRIC SHOCK • HYPERPYREXIA •
• INSULIN •

Reg. with the American Medical Assn.

J. DENNIS FREUND, M.D.
Medical Director and Superintendent

Phones CANAL { 9200
 { 9201
 { 9202

County Cafe Inc.

Fountain—Candies—Flowers—Cocktail Lounge

1901-1903 W. HARRISON ST.—CHICAGO

Dear Alumni:

We are really very modest—

but it is no use denying that we are very pleased with, and slightly proud of, the way you have received the QUARTERLY. Your letters have been unanimously complimentary, your comments heart-warming. We thank you.

Especially do we derive deep satisfaction from supplying to you who are in the armed forces the measure of diversion and enjoyment that you have told us the QUARTERLY brings you. We intend to get the QUARTERLY to you, wherever you are, if it is at all possible, and whether or not you are active subscribers. Thus, we may feel that we are helping you, in a very slight way, to do the grand job that you are doing, at and behind the fronts.

But the QUARTERLY cannot be published with good wishes alone. We ask those others of you, who are fulfilling the equally important task of maintaining civilian health, to support this publication so that it may continue to bring you and our graduates in the services into closer touch with The School and each other.

Sincerely,

The Editor

I hereby enclose (a check for) \$..... (1 year's subscription, \$3.00)
..... (2 year's subscription, \$5.00)

Dr..... Class of.....

.....

.....

The moving pen
moves not alone
nor makes the words that formeth
the best laid plans
of mice and men
are not, until they're borneth

* * * *

Jussien cites a case of a girl who was born
without a tongue but who spoke very distinctly.

* * * *

Sing, Muse (if a theme so dark, so long,
May find a Muse to grace it with a song,)
By what unseen and unsuspected arts
The serpent Error twines round human hearts.

—Cowper

* * * *

If we could read the secret history of our
enemies we should find enough of sorrowing
and suffering in each man's life to disarm all
hostility.

—Longfellow

FOREMOST SURGEONS

*In Every Field of Practice
Around the World*

HAVE COME TO V. MUELLER

★

for Fine
SURGEON'S INSTRUMENTS
SINCE 1895



THE TIME TO
CONTRIBUTE
IS NOW!



Don't Forget our

ENDOWMENT DRIVE

FOR **YOUR** SCHOOL
FOR **YOUR** EDUCATION
FOR **YOUR** STANDING



SUPPORT THE
ENDOWMENT
DRIVE